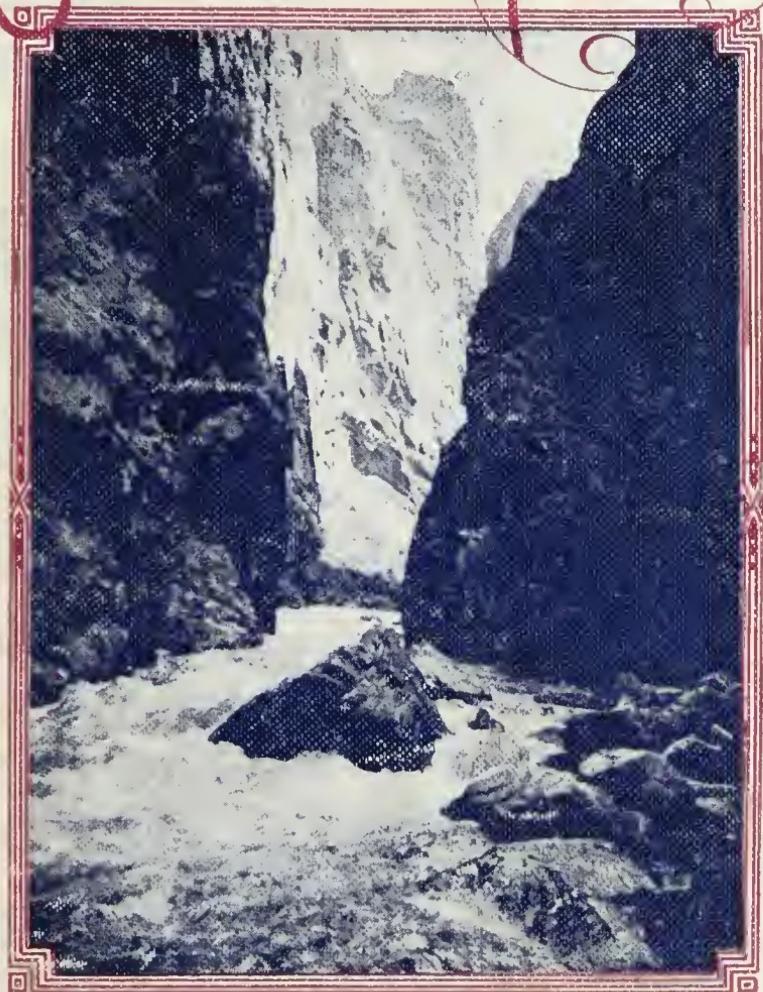


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AND THE GUNNISON TUNNEL

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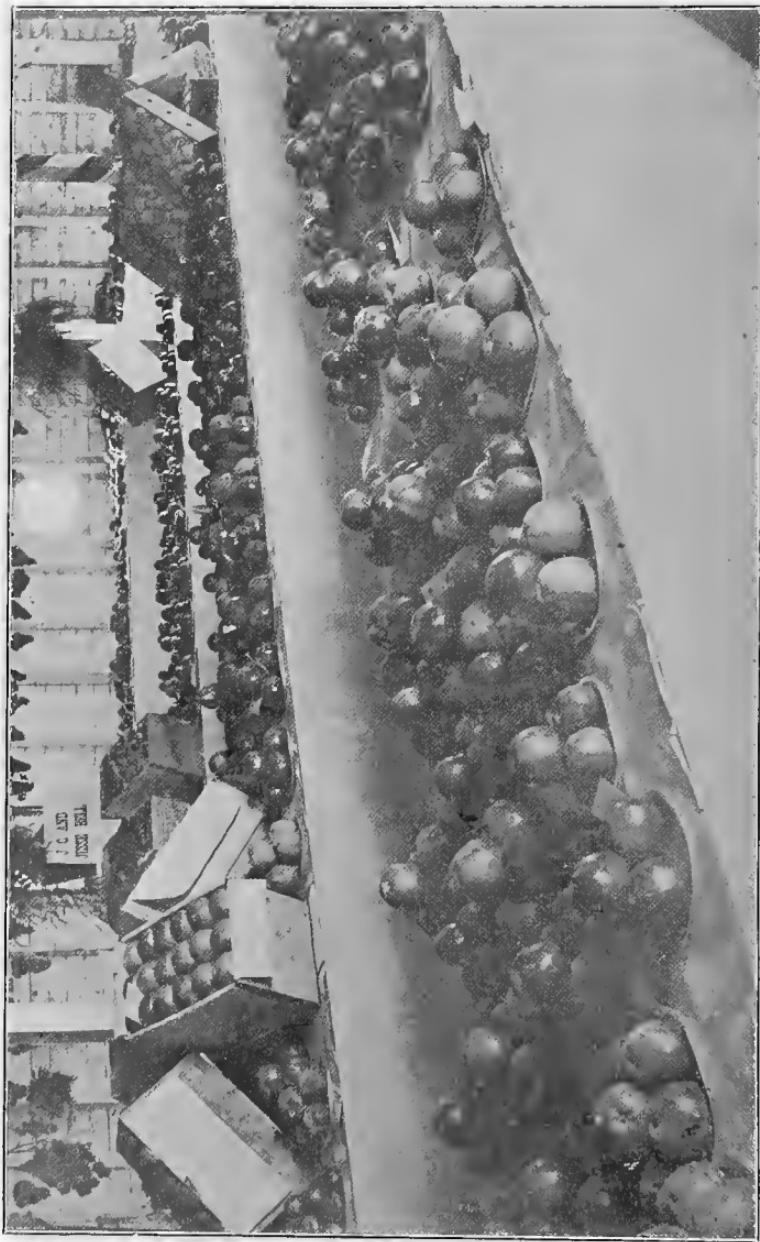


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The Uncompahgre Valley
and the
Gunnison Tunnel



UNCOMPAGRE VALLEY FRUIT EXHIBIT.
"Where kind Nature did her best."

• The 

UNCOMPAGRE VALLEY

AND THE

• GUNNISON TUNNEL

A Description of Scenery, Natural Resources, Products, Industries, Exploration, Adventure, &c

By Barton W. Marsh



Published by
MARSH and TORRENCE
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1905

*Entered according to Act of
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By BARTON W. MARSH

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PREFACE

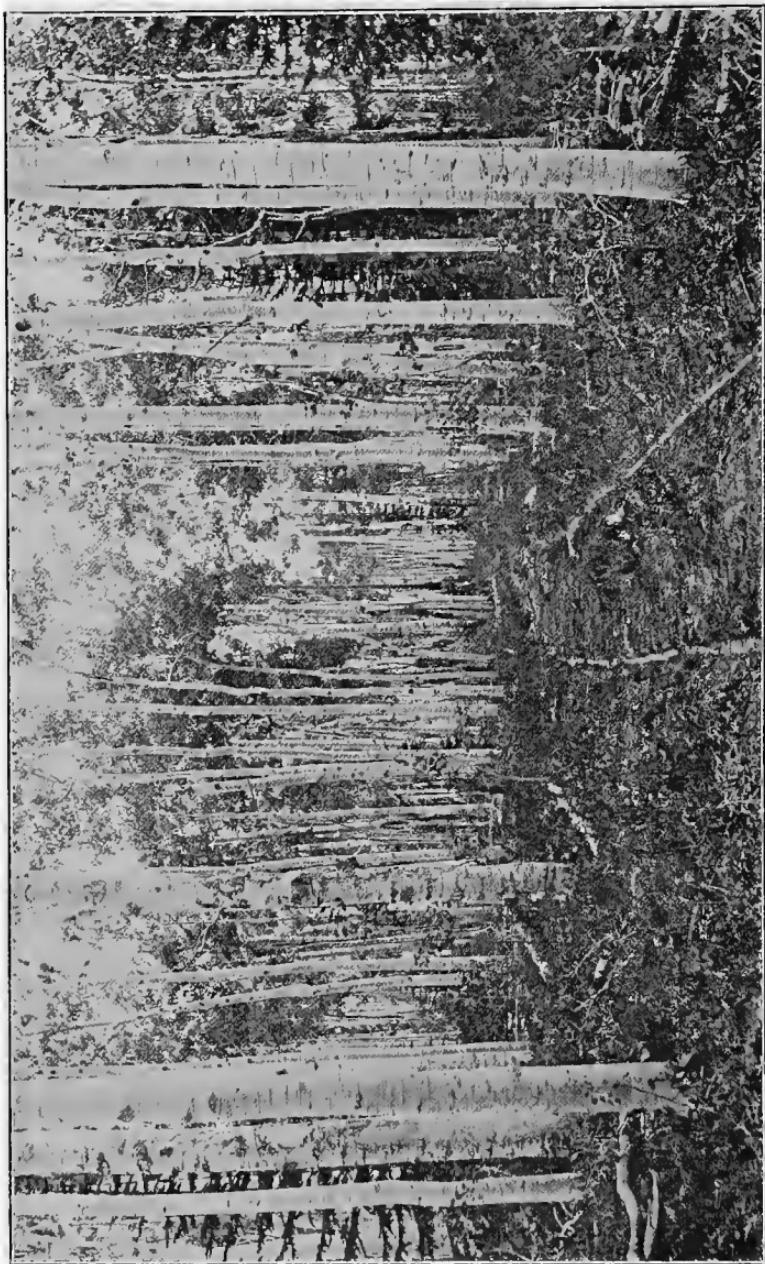
THIS book has been prepared, with a sincere desire to assist those who contemplate making a change of location, and for the benefit of all who seek accurate information about the Uncompahgre Valley, which the Gunnison Tunnel project has brought so prominently before the people of the United States.

The men whose names appear in the back of the book as advertisers are men of good character and reliable business standing, who are personally known to the compilers, and to them we cheerfully refer all who on perusing the following pages may desire to make further investigation.

The cost of this work to the purchaser is but a few cents. If it proves a means of saving him dollars in traveling expenses, etc., we shall feel that its mission has not been in vain.

THE COMPILERS.

THROUGH THE ASPEN FOREST.





LAKE ON GRAND MESA. ELEVATION 10,000 FEET.

COLORADO

Beyond, a thousand miles to westward
Of the dark and sullen waters
Of the sluggish winding river
Called Missouri by our fathers;
Over plains, deserted, barren,
Save for coyotes tuneless snarling;
Save for dry and warning rattle,
As the snake glides to his cover;
Save for sharp and cheerless barking
Of the prairie dog defiant;
Save for owl that sits in silence
In the place of his seclusion;
Save for here and there a rabbit
Speeding on to secret hiding;
Save for cactus and the yucca,
And for sagebrush, twisted, gnarling—
Lies a land of streams and fountains,
Where the sparkling waters tumble
From the lofty, snowy mountains
Down to valleys grand and fertile,
Marked by homesteads, broad and narrow,
Carpeted with green alfalfa,
With wild grasses and red clover,

With the yellow wheat and barley,
 With white oats, and rye dark golden ;
 Trimmed with stately trees of apple,
 Trees of peach, and pear, and cherry,
 Trees of every kind and species
 In such latitude produced,

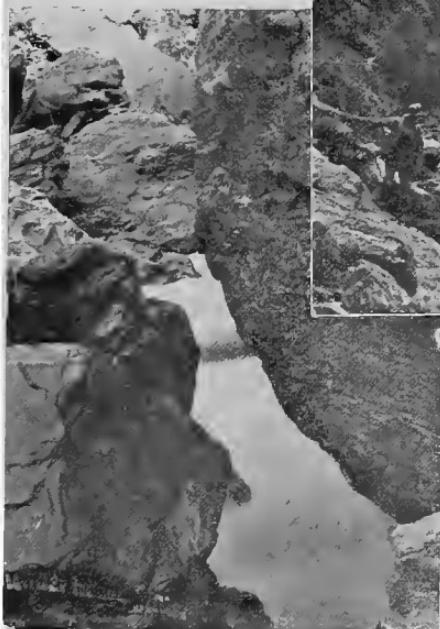


THREE YEAR OLD APPLE TREE

Growing there in rich pro-
 fusion ;
 All the vegetables and
 berries,
 All the delicacies and
 dainties
 That an epicure would
 cherish ;
 Home of countless sheep
 and cattle,
 Home of horses strong and
 noble,
 Feeding peaceful on the
 products
 Grown upon the land so
 fertile,
 Moistened by the laughing
 waters,
 That come rolling down
 the gorges,
 High above the lowly val-
 leys
 Are recesses in the moun-
 tains,
 Found by winding trails
 and roadways,

Leading up and ever higher,
 Over crags and into canyons,
 Over snows and into gulches,

Over leaping mountain torrents
Raging, tearing, roaring,
Leading into stately forests,
Leading into caves and caverns,

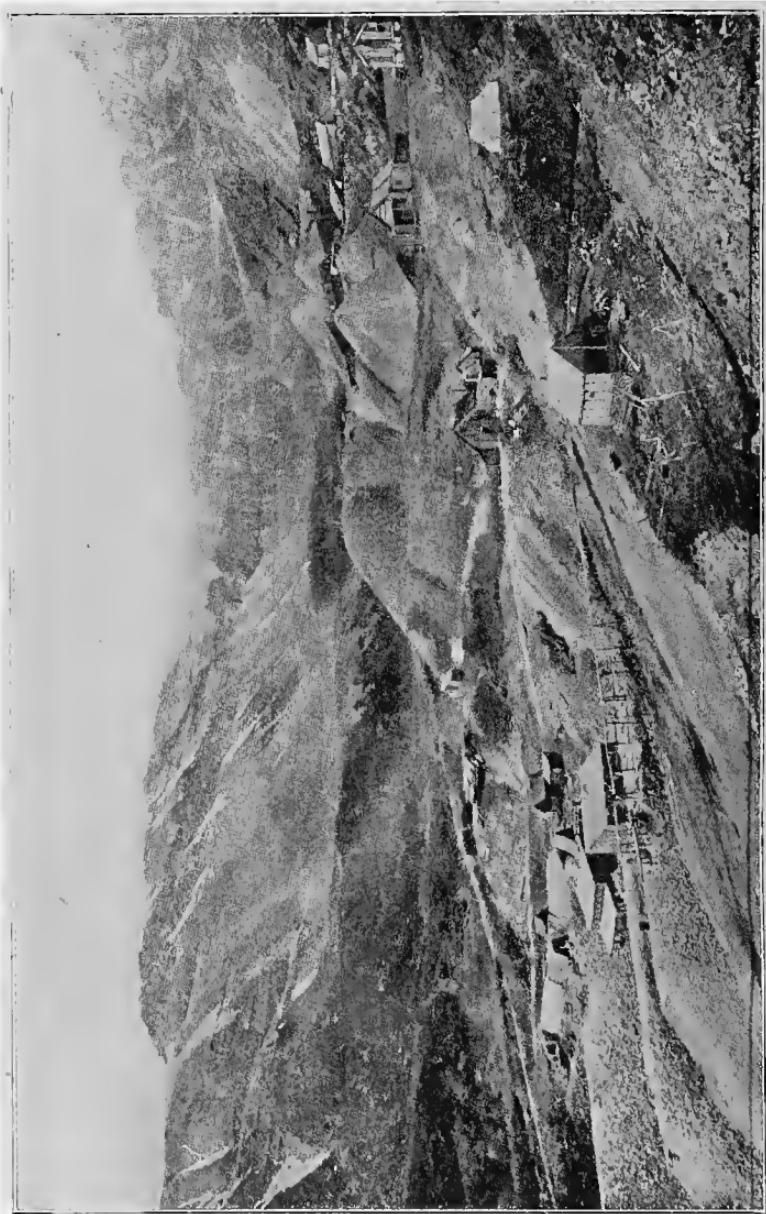


SCENES IN BLACK CANYON

Where the wealth of iron slumbers,
Where the stores of precious metals,
Wait the hand of honest labor.
Deep within the mountain's bowels,
Ever working, never ceasing,
Daring miners are engaged,

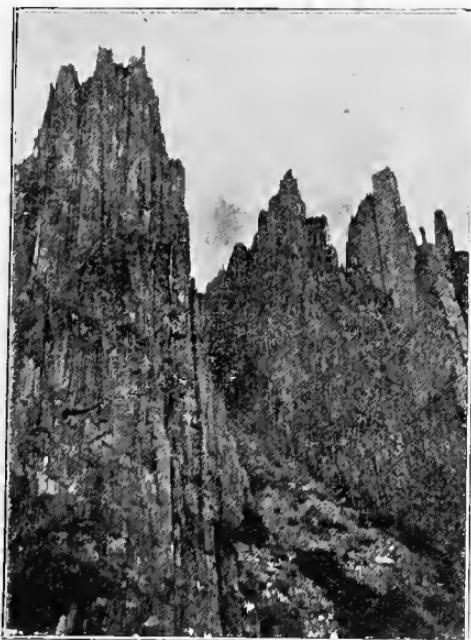


Leading into shafts and tunnels;
Where the yellow gold is buried,
Where the silver hides its treasures,
Where the lead is in abundance,
Where the copper lies deep hidden,



"Where the yellow gold is buried,
Where the silver hides its treasure."

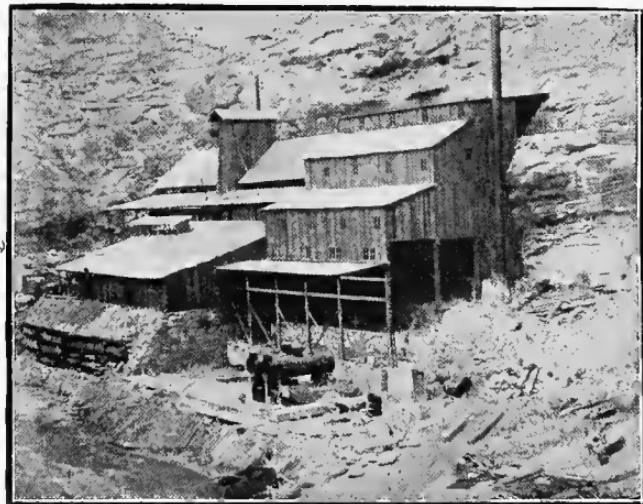
Pounding, driving, drilling, breaking,
 From their rocky fastness tearing
 Out the treasures there enstored.
 There the mills are ever rumbling,
 Day and night in work unceasing,
 Rolling, grinding, stamping, crushing,
 Shaking, washing
 and refining
 Yellow, glittering,
 golden treasure,
 White and sparkling
 lead and silver,
 Somber looking zinc
 and copper.
 Strong and lasting
 steel and iron,
 From the ore the
 sturdy miner
 Gathers from the
 shaft and tunnel.
 Violet growing by
 the snowbank,
 Columbine by fir tree
 stately,
 By the river course,
 clematis,



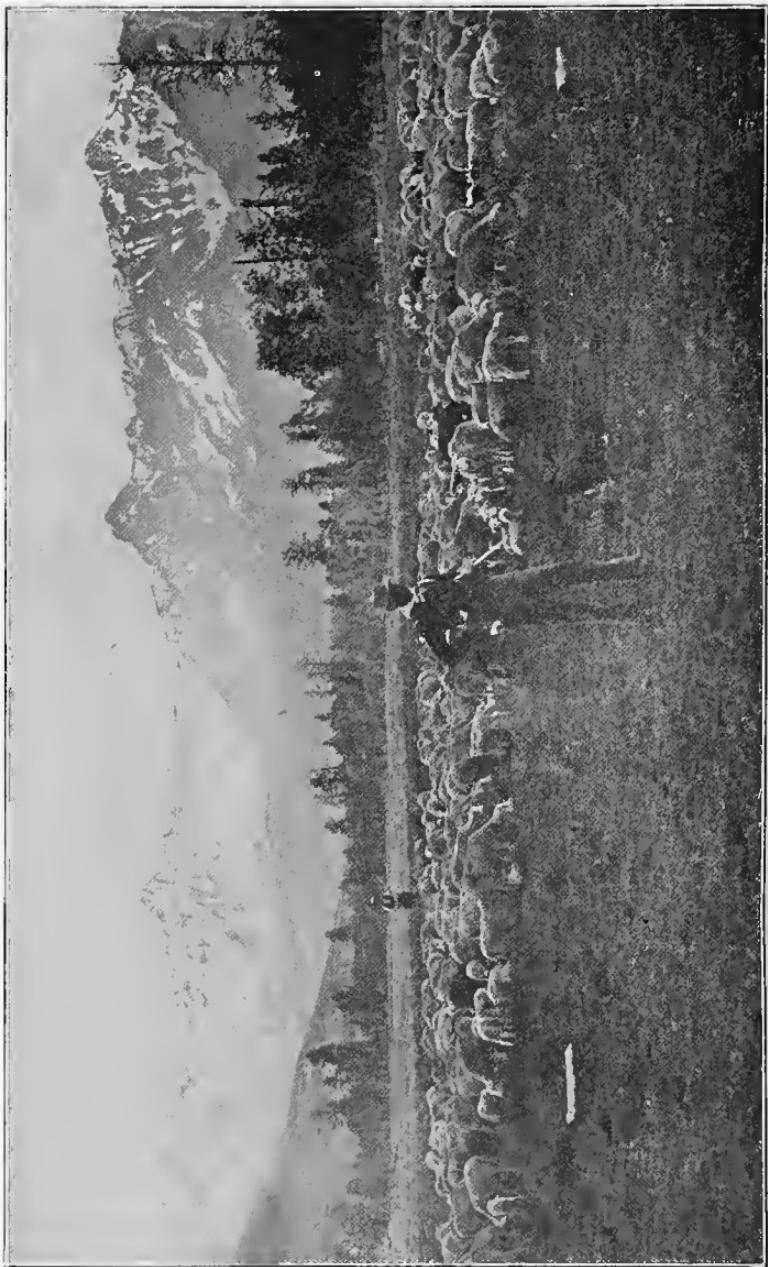
GRANITE NEEDLES.

Pure white primrose in the valley,
 Everywhere profuse of flowers,
 Everywhere the golden sunshine,
 Ever, ever, ever, flooding
 Stately hills and lowly valleys,
 Stretching plains and lofty mountains,
 Quiet nooks and noble plateaus,
 Pouring down in streams unceasing,
 UNCOMPAGRE VALLEY—2

In the autumn and the winter,
In the springtime and the summer;
Sparkling on the glittering snowcap,
Shining on the fleecy cirrus,
Shining on the glossy stratus,
Shining on the massive cumulus,
Shining on the pregnant nimbus,
Shining through the storm and tempest,
Shining on and ever shining,
Blushing in the mountain fastness,
Flirting with the dancing torrent,
Gleaming on the level prairie,
Golden gleaming, silvery streaming—
In the state of Colorado,
Famous, glorious Colorado.



SHEEP HERDING SCENE SOUTH OF HORSEFLY PEAK.





LAKE ON GRAND MESA.

CHAPTER I

SITUATION AND SURROUNDINGS

In the heart of the Rocky Mountains, three hundred and fifty miles southwest of Denver, lies the Uncompahgre Valley, which is destined to become, within a short time, one of the most beautiful and fruitful garden spots on the face of the earth.

The Uncompahgre is not a large valley. It has an average width of twelve miles and is about thirty-five miles long, containing about one hundred and eighty-five thousand acres of irrigable land. The Uncompahgre River flows through the entire length of the valley, and it is from this stream that the present water supply for irrigation purposes is drawn.

The situation of the Uncompahgre Valley is ideal. It is completely surrounded and shut in by the everlasting hills. To the south may be seen about seventy-five miles of the San Miguel Mountain Range, which is a portion of the

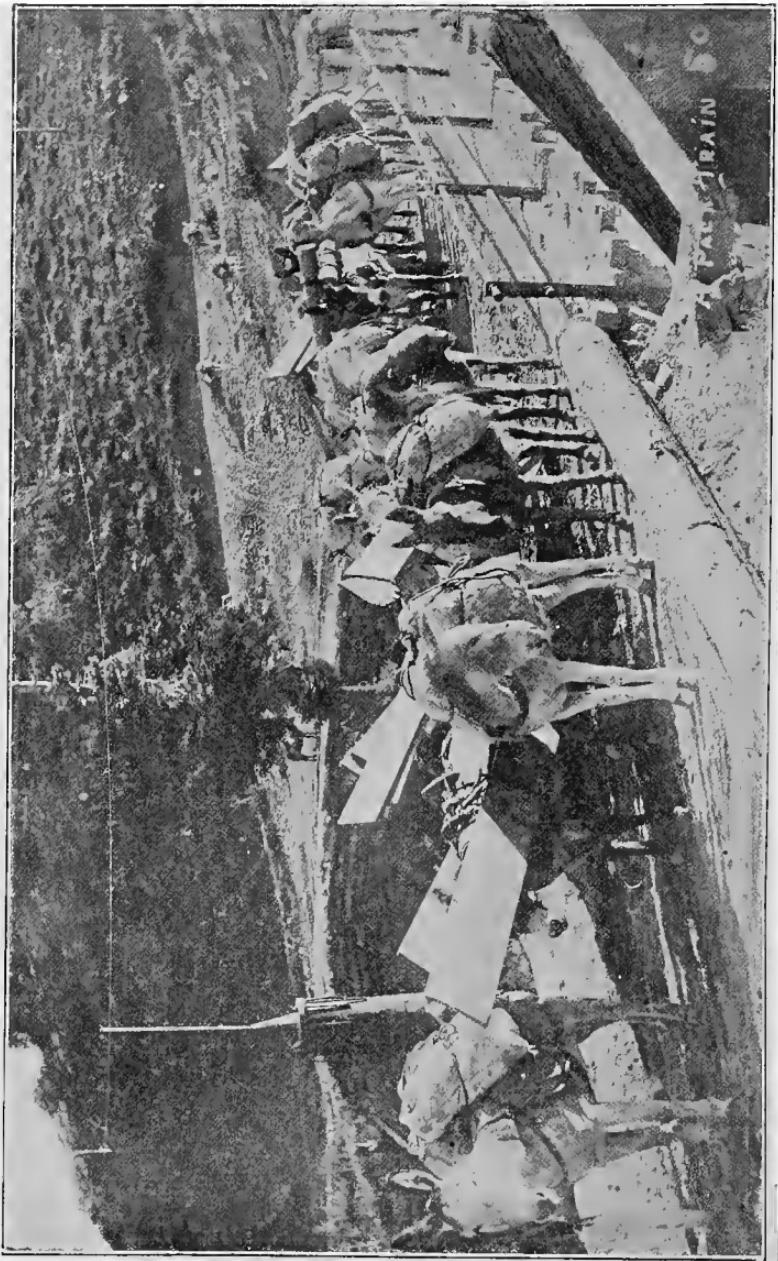
backbone of the Continent. This range is one of unsurpassed grandeur, its many, lofty peaks being covered with eternal snows. In many places the perpendicular walls of its rugged sides have never been scaled by man, and its yawning chasms and abysmal canyons are among the wonders of the world for awe-inspiring grandeur and stupendous magnitude.

To the north, visible from all parts of the valley, towers the Grand Mesa, which rears its flat top ten thousand feet heavenward. For miles and miles its mighty bulk stretches away to the eastward, until it is lost to view in the maze of unmeasured distance. It has been set apart by the Government for a reserve, and as a result its summit and sides are covered with a dense growth of evergreen timber, and it is carpeted with a luxuriant covering of green grass. There are many beautiful lakes upon its summit, which are teeming with mountain trout, and it is the natural home of the deer and wild animals of every description.

To our eastern friends who are sweltering in the heat of their long and oppressive summer, Grand Mesa sends an urgent invitation to seek its refreshing borders for rest and pleasing recreation.

Bordering the upper end of the valley on the west is the Horsefly Mountain Range. This range is covered to the summit with a luxuriant growth of mountain grasses, and presents an attractive appearance at all times.

Towering above the upper end of the valley on the east is the Saw Tooth Range. Its summit is ragged and broken,



PACK TRAIN LOADED FOR THE MINES.

covered with jutting spires of granite, which gives it the name of Saw Tooth. It produces a heavy growth of timber from which the inhabitants of the valley draw material for all purposes. North of the Saw Tooth Mountains and running parallel with the valley for its entire length, is the separating ridge that divides the Uncompahgre Valley from the beautiful Gunnison River.

MINING.

Buried beneath the rocky fastnesses of these mighty hills are incalculable treasures of gold, silver and other precious metals. Day and night, winter and summer, thousand of miners are at work, blocking out the treasures of wealth contained in the mines to be crushed in the mills, melted in the smelters and reduced in the refineries until the pure bullion of gold and silver is given to the commerce of the entire world. We are powerless to measure the extent of our ore deposits, and space will not admit of an adequate description of the mining industry of southwestern Colorado.

Just a few miles from the upper end of the valley is located the famous Camp Bird mine, which has produced millions in gold and silver, and at the present time has millions more blocked out waiting to be removed to the smelters and mills, there to be refined and poured into the coffers of the world.

Underlying much of our land are vast coal deposits, the extent of which has never been estimated, but sufficient

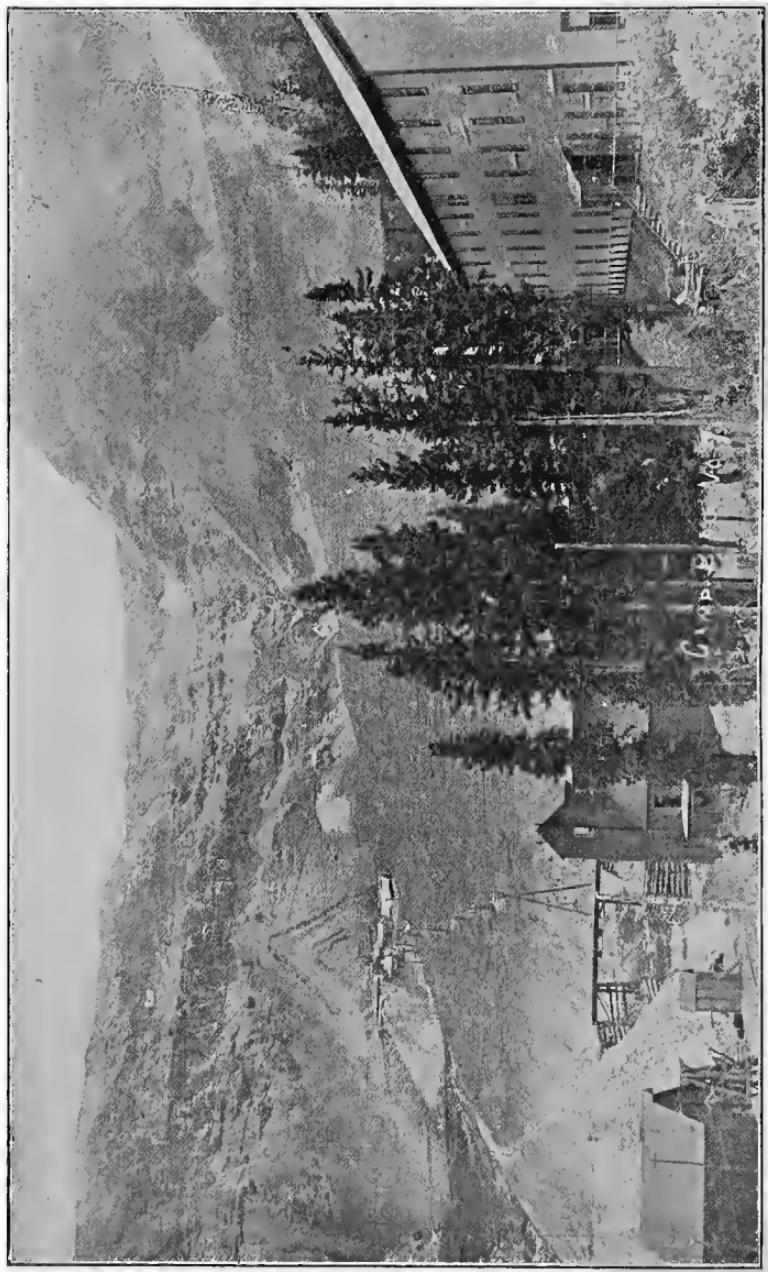
investigation has been made to satisfy all that we have an inexhaustible supply of coal within our borders.

The vast mining industries adjacent to the Uncompahgre Valley afford a stimulus to our commerce that can be found



in but few places in the world. The farmer finds a ready market for all the products of his toil. The artisan can at all times find employment at a remuneration sufficiently liberal to guarantee to himself and family a just apportionment of the comforts of life.

Southwestern Colorado is a vast domain, throbbing with



CAMP BIRD MINE AND BOARDING HOUSE.

life and activity, and it is unceasingly pouring its unstinted treasures into the lap of the world.

In our surrounding mining cities, Ouray, Telluride, Silverton, Rico, Gunnison and Lake City, thousands of teams and pack animals are constantly employed in bearing the ore from the mines to the mills and smelters for treatment, returning with supplies for the thousands of miners who are engaged in bearing the precious metals to the surface. It is not an uncommon sight to see a string of fifteen or twenty eight-mule teams, each team representing a load of ten thousand pounds of ore, worth thousands of dollars, slowly winding their way down the mountain side toward the mill or smelter, there to deposit their treasure, returning to the mine, and repeating the operation day after day throughout the year.

The vast mining industry by which the Uncompahgre Valley is surrounded is one of the safeguards against the stagnation of our industries. The farmer changes the products of his fruitful lands for the gold and silver produced by the mines, and from this there is a constant stream of wealth, which is produced at our very doors, pouring directly into the hands of the producers. We mine our own money in unstinted measure and grow our sustenance in profligate abundance.

The way into the Uncompahgre Valley is over mountains so rugged that in many places their peaks can scarcely be scaled, past many sparkling, plunging mountain torrents, which are fed by the eternal snows that crown the rugged

heights; by stately forests of spruce and pine; through towering canyons, winding round and about the mighty mountains, and through valleys of unsurpassed fertility.

The name Uncompahgre is from a Ute Indian word



War Chief Ignachio

Colorow's Son

Gen. Adams.

Secr. Carl Schurtz

Head Chief Ouray

Chipeta, Ouray's Squaw

meaning "hot water spring," and it is taken from the many hot water springs that help in forming the source of the Uncompahgre River.

EARLIEST OCCUPATION.

Prior to 1881 the Ute Indians held undisputed possession of the Uncompahgre Valley. The head of all their

tribes was Chief Ouray, who many years swayed a scepter of such equity that he was known as "the white man's friend." Never in all his dealings with the whites did he show himself other than their friend, tried and true. Once, when in council with the whites upon some important matter, one of the under chiefs arose and began a tirade against the white man; old Chief Ouray listened for a moment,



HOME OF CHIEF OURAY.

and with the fire flashing from his eyes he arose and leveling a six shooter at the turbulent speaker, uttered one word, "hikee," which is Ute for "get out." The under chief well understood the meaning of the command and scrambled for cover, when the meeting was continued to its conclusion without further interruption.

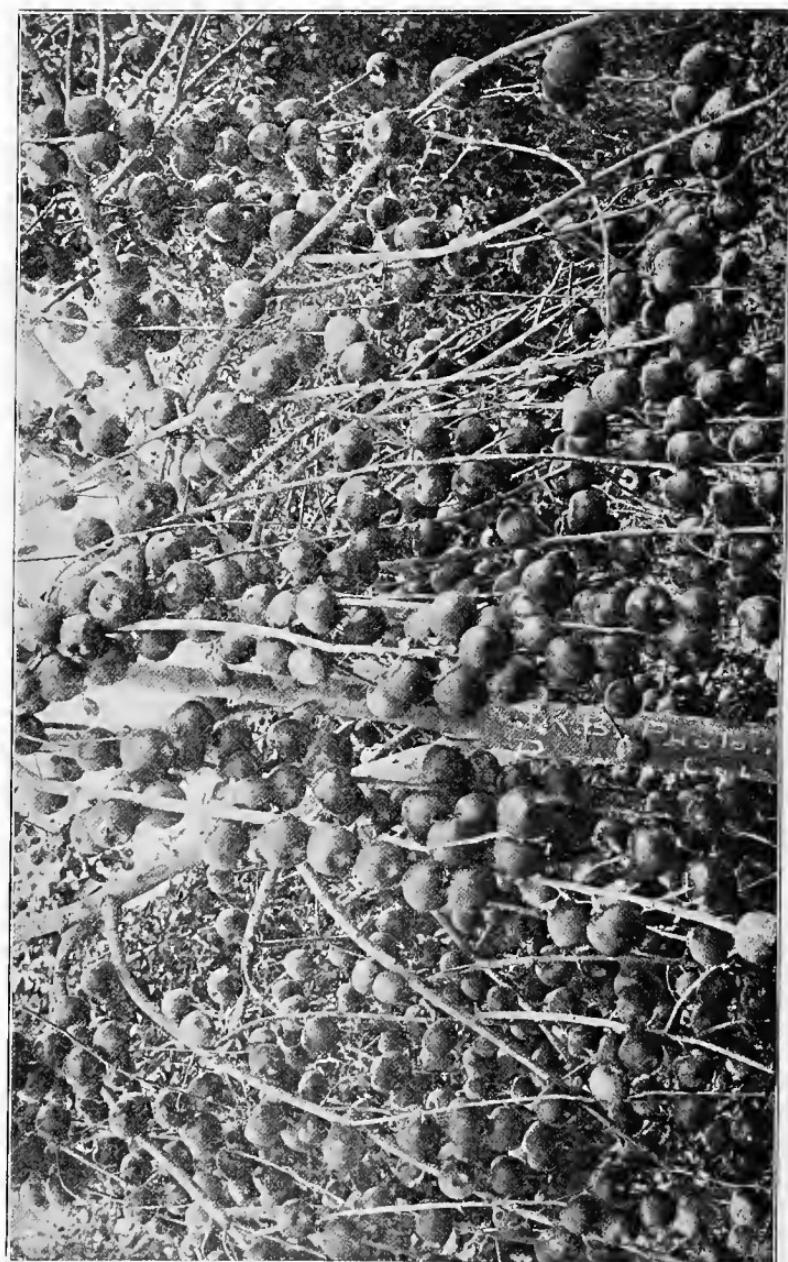
Ouray died in 1879, and now the old settlers of the valley speak of him, with a strange mist in their eyes, as being a noble man with a great heart.

In 1881 the Indians were removed to Utah, and the Uncompahgre Valley thrown open for settlement. At this time the great fertility of the soil was undreamed of. The land is arid, and prior to this time no system of irrigation had been developed for the purpose of supplying it with moisture. No one realized that Nature had locked in its bosom an inexhaustible treasure of productive power that was only awaiting the intelligent application of skill and science to cause to spring into existence products that would startle the world with their variety, richness and size.



HOME OF EARLY SETTLER.

UNCOMPAGRE VALLEY—3



FOUR YEAR OLD UNCOMPAGHRE VALLEY APPLE TREE.



CHAPTER II

RESOURCES AND PRODUCTS

On removal of the Indians the Uncompahgre Valley was thrown open for settlement. As is usual in such cases, a great number of people were hovering upon the borders of the territory, waiting for the arrival of the day when they would be allowed to drive their location stakes upon a piece of land.

Within a short time a large portion of the acceptable land of the valley was located, and the work of taking out ditches for the purpose of irrigation was earnestly begun. The indications at that time were that the Uncompahgre River contained a sufficient water supply for all the land to which it was accessable. Farms were laid out, and homes were rapidly built, until from Delta to Montrose the country began to take on the appearance of thrift and industry.

WATER PROBLEMS.

It was soon discovered that the soil possessed remarkable productive power, and that under careful culture and the proper application of water enormous crops of all products indigenous to the latitude could be grown; but along with this pleasing fact it soon became apparent that the water supply afforded by the Uncompahgre River was insufficient to properly water the lands already occupied by the enterprising homemakers. As years passed and new ditches were taken out, the water supply for all became less abundant, until many were compelled to abandon their promising farms, which were by that act allowed to again relapse into a wilderness. The stubborn fact was at last developed that the water supply afforded by the Uncompahgre River was not sufficient to properly irrigate more than ten thousand acres of land, and upon this basis the inhabitants of the valley were at last forced to settle, with no hope at that time of any relief being offered. A mighty torrent of water plunged through the Black Canyon of the Gunnison River, only sixteen miles away; but it was separated from the Uncompahgre Valley by a massive mountain range, and none at that early date dared dream of a diversion project that would turn its liquid wealth upon the thirsty lands of the valley.

The soils of the Uncompahgre Valley vary greatly, according to location. The Mesa lands are gray adobe, red adobe and red sandy loam. The river bottom land is



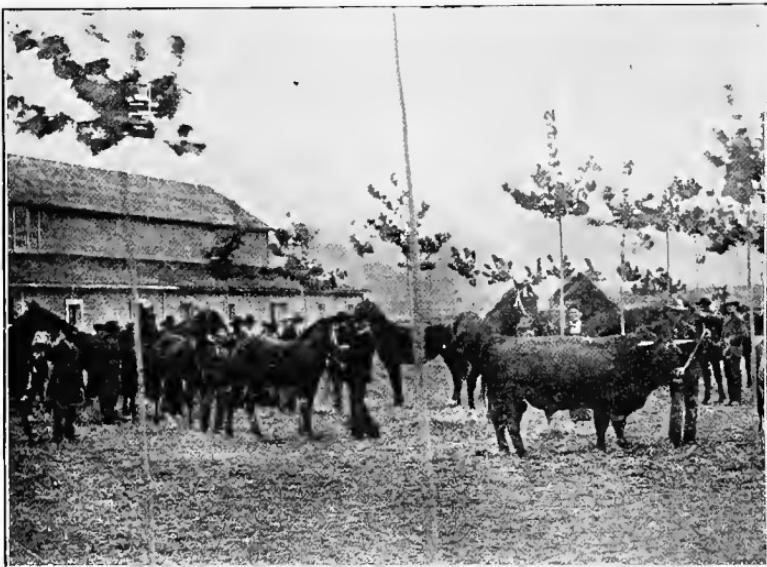
"Home of countless sheep and cattle."

black sandy loam, formed by deposits that have been washed down from the mountains. These lands are pronounced by soil experts to be the strongest in productive power of any in the world.

PRODUCTS.

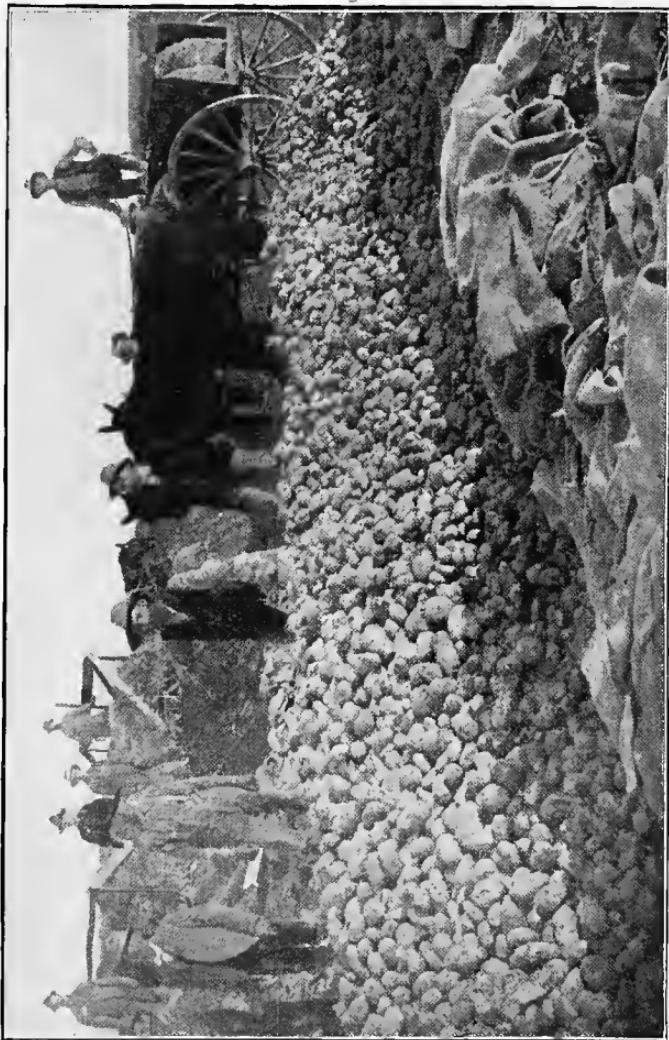
Owing to the limited water supply a larger acreage of the occupied lands of the valley have been farmed in alfalfa than in all other products combined. Alfalfa is a great drouth resister, and will produce an average crop of four tons per acre. It is without question the most perfect, all-purpose feed grown. Cut when just coming into

blossom, and properly cured, it is a hay par excellent. Thousands of beef cattle and sheep are annually fattened upon it without the aid of any other feed, and it is safe to say that seventy-five per cent of the work stock employed on the farms in the valley are given no other food. All the lands of the valley are adapted to alfalfa raising.



"Home of horses strong and noble."

Grain products thrive in all portions of the valley. Wheat produces from forty to seventy-five bushels per acre; instances of yields of seventy-five bushels per acre being numerous, and it is not at all uncommon for an entire field to average sixty bushels per acre. The yield of oats will run from sixty to one hundred and ten bushels, and in 1904 many fields produced from eighty to ninety bush-



TONS OF POTATOES ARE GROWN.

els per acre. Barley is a good crop, and produces a large yield when properly cared for.

All kinds of vegetables are grown in abundance. At the Western Slope Fair held at Montrose, in the fall of 1904, one man exhibited one hundred and seventeen varieties of vegetables, all grown upon his own farm. This same man produced in 1904 on thirty-two hundred square feet of land \$80.00 worth of early peas. Thirty-two hundred square feet of land is a little less than one-fourteenth of an acre, and in that proportion one acre will produce an income of a little more than \$1,100.00. This is not an isolated instance. Another man produced and sold from four and one-half acres of ground, in 1904, \$4,560.00 worth of onions. This gentleman is O. H. Horton, who at the time was Commissioner for Montrose county.

The average potato yield in the Uncompahgre Valley is twenty-five thousand pounds per acre, and in many instances in 1904 the yield was thirty-five thousand pounds per acre. Tons of potatoes are grown which will average twenty potatoes to the bushel, and potatoes weighing five and six pounds are not uncommon. These are not pithy and soggy, as large potatoes in many localities often are but they are sound to the core, cook mealy and possess a flavor never excelled and rarely equaled. There is outside market for potatoes, and the price is seldom below sixty cents per hundred pounds. Potatoes are a standard crop in the Uncompahgre Valley, and in ordinary seasons net the farmer \$100.00 per acre above all expenses. There



WHEAT-FIELD—FIFTY BUSHELS PER ACRE.

have been two instances of over-production of potatoes in twenty-four years.

The population of the valley is made up of people coming from all parts of the United States and Canada, as well as a substantial class of citizens of foreign birth. With but few exceptions all unite in declaring that the Uncompahgre Valley is unexcelled in any part of the world for productive soil and congenial, healthful climate.

The soil is full of vitality and strength and responds to intensive cultivation. It will produce in proportion to the care bestowed upon it. As yet the limit of productive possibilities has not been reached in the Uncompahgre Valley. The merry ripple of the crystal waters of the Gunnison River through the irrigating canals of the Valley will sound the death knell for slack and indifferent farm-

ing. It will usher in conditions that will demand the most thorough system that can be devised for the tilling of the soil. It will bestow upon the inhabitants of that section the key to soaring possibilities, the limit of which human wisdom cannot forecast. The treasure of all wealth is locked in the soil, and in the Uncompahgre Valley Nature has been prodigal in the bestowment of her bounties.

SMALL FARMING THE BEST.

The farmers have long since learned that large farms in most cases are to be avoided, if one desires to accomplish the best results. They have learned that a small place well cared for is far more profitable than a large farm poorly cultivated. The eastern farmer who has been accustomed



IRRIGATING STRAWBERRY FIELD.

to handling a one hundred and sixty acre farm will find upon locating in the Uncompahgre Valley, that forty acres is equal in every respect to one hundred and sixty acres in the east. He will find that, properly handled, he can em-



PICKING STRAWBERRIES.

ploy as many men on forty acres as he employed in the east on one hundred and sixty acres, and at the same time realize a larger net return than is possible on a large farm in the east. There is legitimate reason for this, and that reason is, that the land in the Uncompahgre Valley has never yet been taxed to the limit of crop production.

Among farmers, as among no other class, there is a tendency to take on more work than can be successfully accomplished. This is especially true in irrigated countries. In the spring when the work is moving nicely, and not

crowding, and appearances indicate a good year, the average farmer thinks he will spread out and make a big thing, and as a result of the spreading process he takes on more work than he can successfully handle during the rushing season, and so at last finds himself literally swamped with weeds and work, with no recourse but to let matters drift, and do the best he can. This brings discouragement and dissatisfaction to many farmers, who might by cutting half in two the acreage they are trying to farm find upon that reduced basis abundant remuneration for their labor.

The time for intensive cultivation of small tracts of land has fully come. Ten acres of Uncompahgre Valley



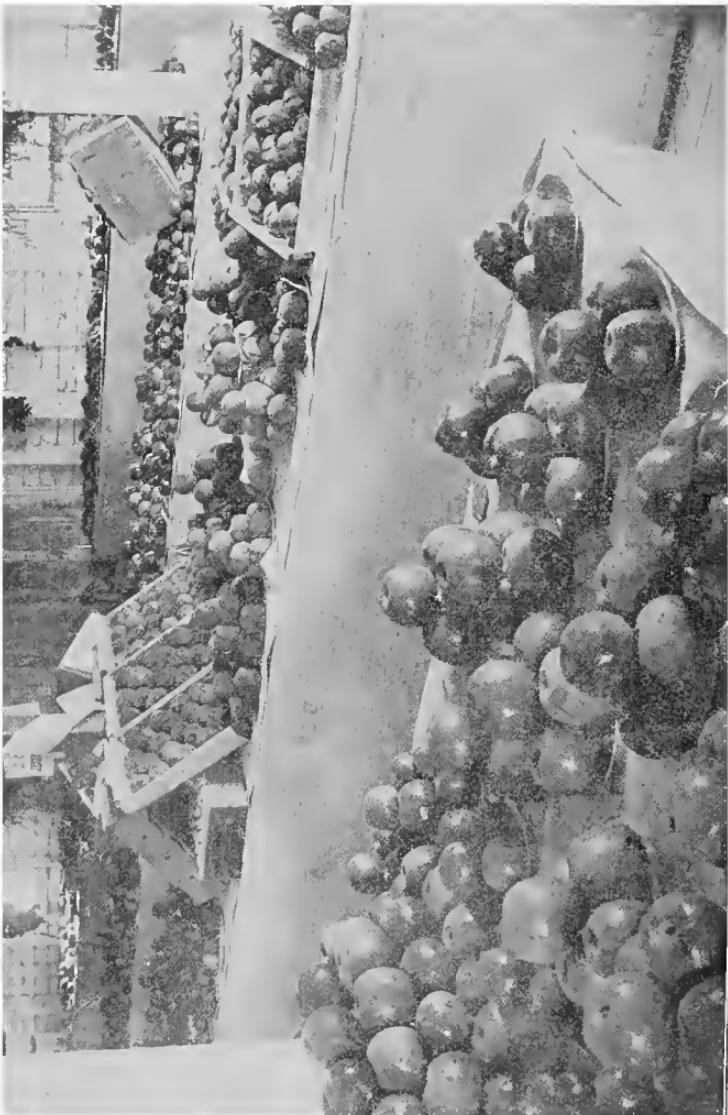
GOOSEBERRIES, ONE HALF NATURAL SIZE.

land in fruit, berries, vegetables, etc., is enough to provide a comfortable income for any family, while in many cases a smaller acreage would be better, and would afford more satisfactory results. It is true that if one decides to engage in stock raising, a larger acreage may be profitably handled in hay and grain, but most of the land will in a short time become too valuable to devote to such purposes.

The enormously productive soil must be seen and studied to be appreciated. It is impossible to put upon paper an adequate description of the resources and products of the valley. The land will do all that is claimed for it in this book, and then the half is not told.

FRUIT CULTURE.

Fruit culture is one of the valley's most important industries. The Uncompahgre Valley challenges the world in apple production. The fruit is large, well formed, smooth, free from disease, and possesses a flavor and keeping qualities that cannot be excelled. The fruit is said to be the most perfect and to possess the richest color that science has yet been able to produce. During the fruiting season the valley enjoys a cloudless sunshine, which, with the system of irrigation employed, applying the water at just the time required, imparts a color and flavor that has become famous in all parts of the world. Fruit failures are unknown in the Uncompahgre Valley. The peach is the most delicate fruit tree grown in the valley, and there has been only one peach failure in twenty-five years.



UNCOMPAGRE VALLEY FRUIT.

Apple orchards, when in full bearing, and of proper varieties, such as Jonathan, Winesap, Ben Davis and other standard apples, will net the grower from \$150.00 to \$500.00 per acre. Uncompahgre Valley apples are always in demand, and buyers are on the ground as soon as the crop is insured against frost in the spring, and will advance money on the prospective crop for the purpose of assisting the grower to care for the same until it is gathered and ready for shipment. Apple trees will usually begin bearing the third year after planting, and will attain a well developed growth in from seven to nine years.

Next to the apple in point of commercial importance stands the peach. There are but few places in the United States where peaches can be successfully and profitably grown. The Uncompahgre Valley is one of these most favored places. The Elberta is the leading variety, which is no doubt due to its beautiful appearance, size, flavor and excellent shipping qualities. In many sections where peaches are grown it is found necessary to heel the trees every winter, but such is not the case in the Uncompahgre Valley. They require no more attention than the apple; and the trees being unusually vigorous attain a greater age than in any other place known to the writer. There are peach orchards in the valley that have been in bearing for fifteen years, which are still strong and vigorous, and were in 1904 loaded with delicious fruit. One ten-acre peach orchard in 1904 produced fifteen thousand boxes of Elertas, which netted the owner fifty cents per

box in the orchard, clearing for him the neat little sum of \$7,500. Other and greater productions can be cited. Apple, peach, pear, cherry, apricot, plum, prune, quince, and nectarine are the principal tree fruits grown in the valley.

Berry culture is an important industry, strawberries



being grown for the trade in large quantities. It is rare that an acre of strawberries will produce less than \$700.00 worth of fruit, and many instances are known where an acre has produced \$1,200.00 worth of marketable berries. At the time of this writing, the twenty-sixth of June, the strawberry season is at its height, and a few days ago the writer assisted in gathering berries, the smallest of which measured four and one half inches in circumference, and it required just twenty of them to make a yard of berries. Six of the largest ones measured a foot, lying side by side. Other berries, such as raspberries, blackberries, dewberries, etc., are grown in abundance, but the strawberry is the leader in this line of produce.

We wish to emphasize the fact that the results herein related are not accomplished by an indifferent and listless method of cultivation. Skill combined with the most thorough work has been required to bring forth these marvelous productions. It may require but little skill or science to sow a field to grain or alfalfa, and gather some return therefrom for the labor expended, but the thorough



CORN AND PUMPKINS.

farmer figures to receive the maximum return for labor expended, and he realizes that it will require all the skill he possesses to draw from the soil the treasure it contains.

Most of the lands contain a small per cent of adobe, which will, when covered with water and then subjected to the heat of the sun, become as hard as burnt brick, by which it will be readily seen that skill must be connected with labor in order to accomplish complete and satisfactory

results. The application of an improper tool could easily ruin the labor of an entire season. The injudicious application of water could in an hour destroy a good crop prospect for the year. This has been done times without number by persons who have insisted upon applying eastern methods to the soil. When intelligently handled the land is easily worked, requires but little moisture, and will surpass the most vivid imagination in productiveness. We could not urge people to locate in the Uncompahgre Valley whose minds are not open to enlightenment upon the industrial problems the application of Gunnison water to the lands is bound to develop.

STOCK, POULTRY AND BEES.

Stock raising is another very important industry of the valley. There are many reasons why the Uncompahgre Valley should be an ideal country for stock. First, the winters are never severe enough to demand shelter for the stock; there are no cold sleets to cover the animals with ice, thus causing them to shiver and contract with cold. There is no weather severe enough to prevent the stock from taking on fat when properly fed. The surrounding mountain ranges afford superior grazing for thousands of horses, sheep and cattle. The constant climbing, in connection with the atmospheric conditions, produces lung expansion that develops the animal into the hardiest type of animal growth known. Uncompahgre Valley steers have been awarded both first and second prizes at the Chicago and St. Louis World's Fairs.



THOROUGHBRED WHITE LEGHORNS.

There are at the present time about sixty thousand head of high grade sheep in the valley. These vast flocks produce annually forty thousand lambs, which top the eastern market. The wool pays all the expenses incident to the growing of the sheep, leaving the lambs as the net profit. Sheep are self-supporting, the grazing lands furnishing ample pasture for all times of the year.

Poultry raising is by no means a small industry in the Uncompahgre Valley. Many people are engaged exclusively in this enterprise, and in all instances when given intelligent attention it yields a handsome dividend. The climate and soils are especially adapted to poultry raising, and the markets for poultry and eggs are all that could be desired.

HONEY.

Honey is a very important article of commerce; there being approximately 5700 colonies of bees in the valley. The blossom of the alfalfa produces a fine quality of pure, white honey, for which there is always a good demand. A crop of honey and a crop of hay may be taken from the



APIARY, UNCOMPAHGRE VALLEY.

same field, and the income from one will be about as much as from the other. This has actually been done. It is a matter of much pride in the valley that the honey produced took the first prize at the great Fair at St. Louis in 1904. The Uncompahgre Valley is a land of sunshine and flowers, and these are essential to the production of good honey.

THE SUGAR BEET INDUSTRY.

Sugar beets have become a staple product in Colorado. This industry was introduced into the Uncompahgre Valley in 1904, and the average yield for that year was twelve



BEET FIELD—TWENTY TONS PER ACRE.

tons per acre. The industry was new to the people, much of the land was in poor condition, it having the previous year been run in grain or alfalfa, which left the ground filled with stubble and roots, making cultivation and irrigation of the beets a laborious task. On land that was in proper condition for such croppage the yield was from eighteen to twenty-two tons per acre. In other places in Colorado, the first year's yield produced by inexperienced growers has not exceeded nine tons per acre. The same

places are now producing twenty tons per acre as an average yield. The average amount of saccharine matter in the beets grown in 1904 was sixteen per cent; on some lands it ran as high as nineteen per cent. This has been proved by scientific test to be the highest per cent of saccharine matter found in any sugar beets. This industry is bound to become one of the most important in the valley. There is a demand for all the sugar beets that can be grown, and sugar factories will soon be located in Delta, Olathe and Montrose. One factory will be built at one of the above named places to handle the crop of 1906.

Sugar beet culture is a pleasant and profitable occupation. It forces the farmer to make a war of extermination against weeds, and brings the land into a high state of cultivation, which causes the farm to present a beautiful appearance, and best of all it puts into the grower's heart the consciousness that he is engaged in a paying proposition.

There are many advantages presented in the growing of sugar beets. First, the grower knows in the spring, before a seed is planted, what he will receive in cash for his crop in the fall. Second, he knows within a few dollars just what it will cost to produce his crop of beets, and if he is familiar with his land and understands his business, he knows within a few tons of what he can produce. There is no business in which a farmer can engage that requires so little risk as the growing of sugar beets. It is an industry in which he is reasonably safe in figuring ahead, for

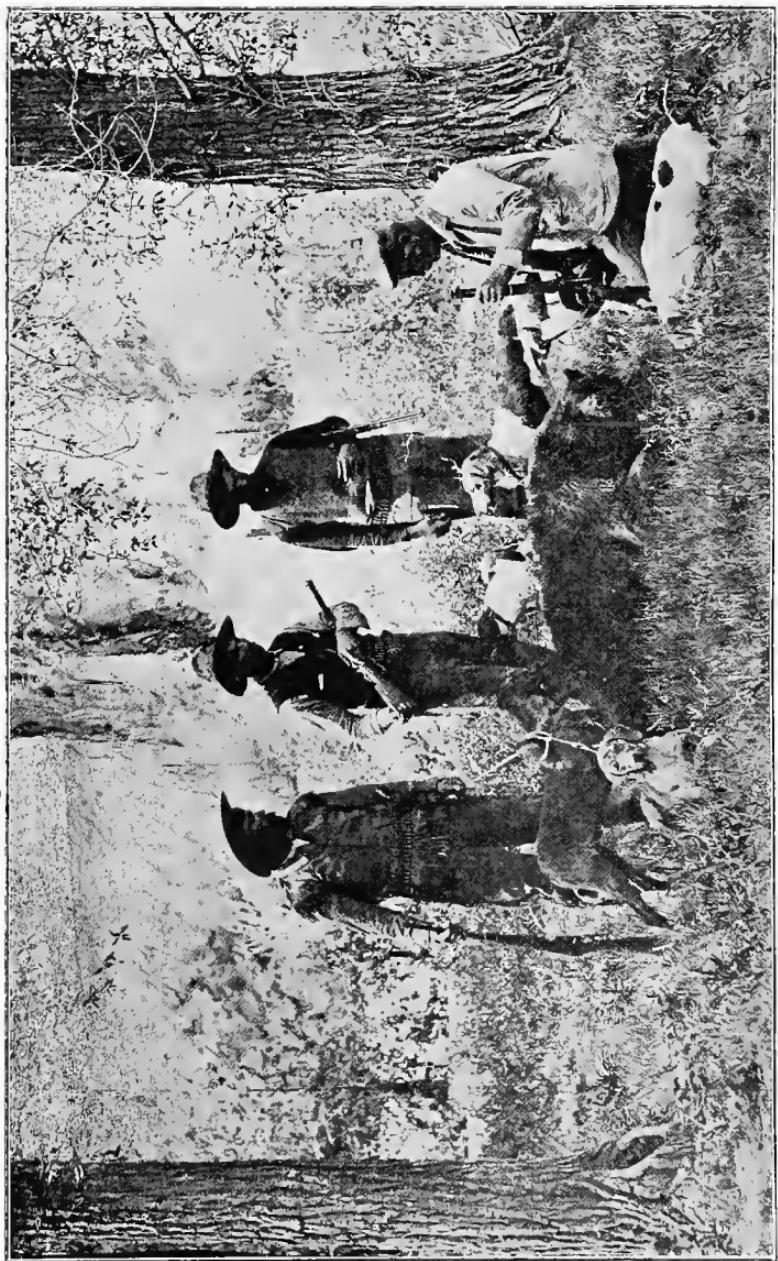
he is not compelled to take chances on fluctuating prices.

The preparation of the soil for this important crop is a matter worthy of considerable thought and careful consideration, and that which applies to the sugar beet crop applies to all other crops in the matter of soil preparation. Land in the Uncompahgre Valley should, whenever possible, be plowed in the fall, and then thoroughly irrigated just before freezing time. The fall plowing loosens up the soil, and the late irrigation fills it with moisture so that it will freeze and thaw with every alternate change of weather throughout the winter. This process melts and pulverizes every clod and accomplishes the first and important work of preparing the seed bed, which must be carefully and thoroughly done if one desires perfect results. When the proper time for planting arrives, the beets should be drilled in the dry soil, after which they should be furrowed and thoroughly watered. As soon as the ground is sufficiently dry a light harrow should be run over it for the purpose of leveling the ground to prevent the escape of the moisture, and at the same time to break up any crust that may have formed as a result of irrigation. From this time until the crop is matured good judgment must act the leading part in caring for the same. Sugar beets can be grown, harvested and placed on the car at a cost of \$30.00 per acre. Most of the land will produce twenty tons per acre, which nets the owner a profit of \$70.00 per acre. The best farms in the valley are now worth \$100.00 per acre, and planted to sugar beets they will pay for them-

selves in two years. No other crop can be grown from which the farmer can realize such speedy and sure returns.

Elberta peaches will net the grower from \$400 to \$1,000 per acre above all cost, but it requires from seven to nine years to bring a peach orchard into full bearing. Potatoes often net the grower \$100 per acre, but the prices are subject to great fluctuation, and for this reason potato culture, while taken one year with another is a very paying crop, does not rest upon the permanent basis that beet culture rests upon.

We have endeavored in this chapter to simply set forth the principal products grown in the Uncompahgre Valley. Space has not admitted of an extensive description of any one product. Some upon reading this may be inclined to say that the facts have been overdrawn, but we beg to state that instead of overestimating the phenominal productiveness of the lands of the Uncompahgre Valley, we have in many instances feared to tell all that has been done in the matter of crop production. We wish it understood, however, that the facts we have gathered relative to this matter, have been taken from farms, orchards and gardens which have been thoroughly and intelligently handled. No one need expect to go into the Uncompahgre Valley and find farms that will take care of themselves. Results are only obtained from skill and intelligent labor. The more skillful and painstaking the labor applied the greater will be the results obtained.



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THE TERROR OF CIMARRON. KILLED IN THE SPRING OF 1905 BY URI HOTCHKISS.

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CHAPTER III

PRESENT WATER SUPPLY, IRRIGATION, CLIMATE AND RECREATION

The water supply for the purpose of irrigation in the Uncompahgre Valley is limited. The Uncompahgre River, from which ninety-five per cent of the water for irrigation is drawn, has its source from springs and the snow that falls in winter upon the San Miguel Mountain Range. Until the first of July there is usually water enough going down the river to irrigate the entire valley. This water comes from the melting snow, and as soon as it is gone, the water supply diminishes to about enough to thoroughly irrigate ten thousand acres of land. The valley is wholly dependent upon irrigation for the application of moisture upon the lands, as the rainfall is never sufficient to act any part in the preservation of crops from drouth.

For two decades the farmers have struggled with the vexing problem of water shortage. Conscious that their lands were the most fertile in the world, they were forced

to battle with the unequal conditions, caused by a water supply so limited that it would not admit the cultivation of a single acre of the fertile lands that were lying untouched from one end of the valley to the other. No inducements could be offered to immigration because the water supply was exhausted, and sixty five per cent of

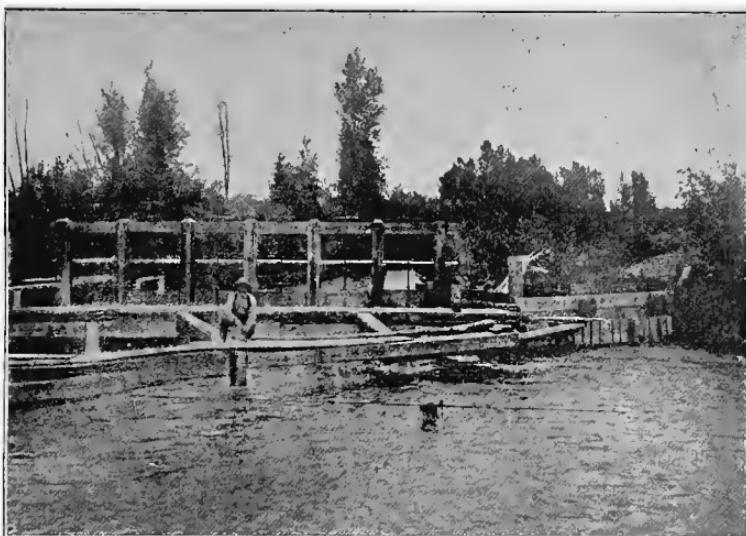


ORCHARD SCENE.

the farms under cultivation had no assurance of water after the first of July. In spite of these unfavorable conditions, the limited acreage that had any semblance of a water right was carefully farmed, and owing to the exceeding fertility of the soil, good incomes were made and homes built up.

PRIORITY OF WATER RIGHT.

The present water supply is regulated from the river by means of commissioners appointed by the state. It is

**HEAD GATES OF CANAL.**

the duty of the commissioners to see that each ditch appropriates only the water to which it is entitled by priority right. Priority is a right granted by law, which is sacredly guarded in all irrigated countries where there is an insufficient water supply. Its purpose is to protect the earlier settler against those who, coming in at a later period, might attempt to appropriate a portion of the limited water supply. It is a right that is many times outraged, and yet it offers the only means of protection to water rights where there is insufficient water to cover all oc-

cupied lands. Where there is an abundance of water for all, priority right is inoperative.

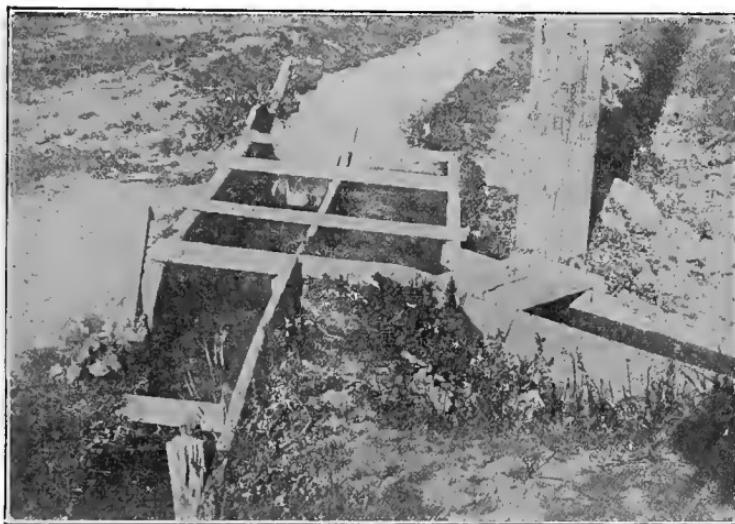
SYSTEM OF IRRIGATION.

The water is taken from the streams by means of ditches, through strongly built headgates, that the flood waters in



WATER DIVISION IN IRRIGATION NO. 1.

the spring cannot wash away. Ditches are given sufficient fall to the mile to keep them free from any accumulation of sediment, drift and other matter that would naturally gather, were the water flowing on an easier grade. At proper places along the main ditches, lateral boxes are



WATER DIVISION IN IRRIGATION NO. 2.

placed, having headgates that can be raised and lowered at will, for the purpose of regulating the flow of water. Through these boxes the water is drawn, and thence carried through smaller ditches to the places where it is to be applied to the lands. The water is taken from the laterals into what are called head ditches, which are arranged to run upon the highest portions of the land to be irrigated.

The land to be irrigated should be laid out in furrows, the space between varying according to the nature of the ground to be irrigated. These furrows should be about four inches deep, and thirty rods in length. A small stream of water should be turned into each furrow and left to run a sufficient length of time to thoroughly moisten the space

between. It usually requires but a short time for the water to run the length of these furrows, and then it should be taken by another head ditch, and the process repeated on the land below. By this system of irrigation the water



HOW WATER IS DISTRIBUTED IN IRRIGATED FIELDS.

does not flood the surface of the ground, which it is very essential to prevent, as flooded ground will invariably bake, thus causing great injury to the crop.

Most crops require from three to five applications of water during the season, although excellent crops can be grown, when thorough cultivation is persisted in, with two waterings.

Irrigated sections possess powerful advantages over sections where rainfall is depended on for moisture. Under

irrigation, crops can be given moisture at just the right time to accomplish the best results. Products grown under irrigation possess qualities that can be obtained under no other system of farming.

The cost for a season's irrigation varies from a few cents per acre where water is drawn from the small, co-operative ditches, to \$2.10 per acre when drawn from the large, company canals. The service rendered by the large canals is more efficient than that afforded by the smaller ditches,



DELIVERING WATER INTO THE WASTE DITCH.



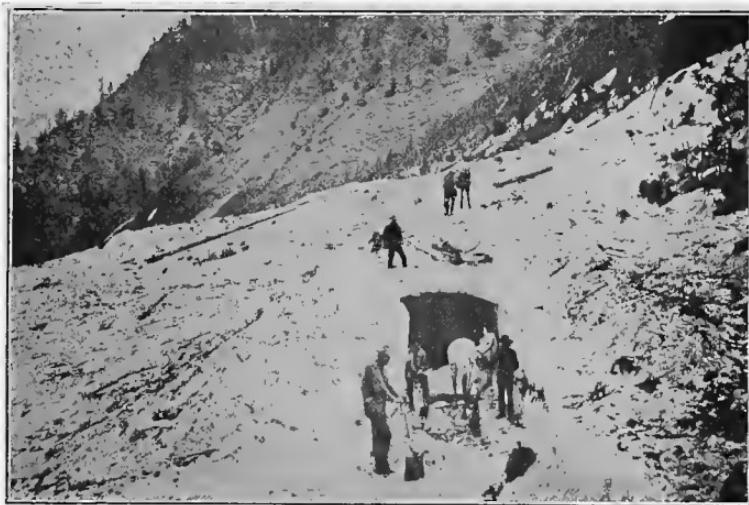
IRRIGATION OF ORCHARD IN DECEMBER.

and requires no attention from the farmer. When the Gunnison Tunnel is completed the cost of water will be the same throughout the entire valley, no profits will be allowed to accrue from the sale of water, and the price paid will be fixed according to the actual cost of ditch maintenance.

CLIMATE.

But little need be said about the climatic conditions of the Uncompahgre Valley, although the climate is one of the most important features for consideration in connection with any section that is extending invitation to prospective homemakers. The valley has a mean altitude of five thousand feet, and slopes to the northwest in gradual decline

of thirty-five feet to the mile. There is no such thing as nights being made uncomfortable by excessive heat. It is a pleasure and a rest to sleep at night during the hottest months of summer. During the night, summer and winter, there is always a current of air moving from the southeast to the northwest which is the general course of the valley.



TUNNEL THROUGH SNOWSLIDE. HEAD WATERS
OF THE UNCOMPAHGRE RIVER.

In the direction from which the night breeze comes, at a distance of about forty miles, lies the San Miguel Mountains, which are a portion of the Continental Divide. These lofty peaks are covered with perpetual snow, and from this invigorating and refreshing storehouse of frozen wealth the night breeze of the Uncompahgre Valley is drawn. With the dawn of morning the current of air changes and is

drawn up the valley during the day. There is seldom a time during the day when circulation of a refreshing current of air cannot be felt. Sunstroke, cyclones and tornadoes are unknown afflictions in the valley. The mean tem-



CAMPING OUT.

perature for the six months from June to November is 58.4 degrees, from November to June it is 37.5 degrees. For the three warmest months, June, July and August, the temperature ranges at 68.3 degrees, for the three winter months, December, January and February, the average temperature is 27.5 degrees. There are but few days in the year in which the ordinary work connected with the farm life cannot be carried on. There is a remarkable absence of moisture in the atmosphere, and zero weather, of

which there is a little sometimes, is not noticed. For healthful climate the valley ranks first in the United States. Pulmonary and asthmatic troubles find instant relief in the dry bracing atmosphere of southwestern Colorado.

RECREATIONS.

Opportunities for social and recreative diversion are abundant, and the scenery that constantly greets the eye



A GOOD CATCH.

is uplifting and inspiring. The lowly winding valley is shut in by massive, towering mountains that stand as silent sentinels, assuring protection and safety to all seeking rest and homes beneath their shadows. Beneath the

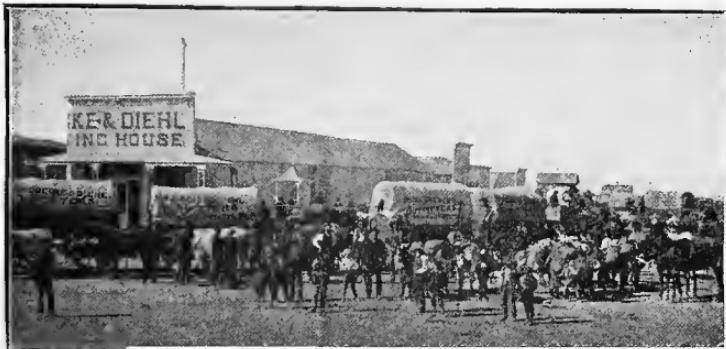
shades of their towering trees of spruce and pine may be found a great variety of game, from mountain grouse to bear and mountain lion. Venison is not an uncommon dainty to the inhabitants of the Uncompahgre Valley who desire to indulge in such bill of fare. The mountain brooklets and streams are teeming with trout, which is the greatest table delicacy known to the epicurian. If one tires of the warm summer sunshine of the valley, a few hours drive with his team will place him in the silent recesses of the mountains where he can indulge to his heart's content the sports and pleasures that are so dear to many.

During the months of August and September camping parties are common, in which large numbers of the inhabitants of the valley seek recreation in the mountains. Family parties to the mountains afford delightful opportunity to spend a few weeks away from care and toil at a cost not exceeding the daily expense of the home.





HEAD OF BLACK CANYON.



MONTROSE IN 1882.

CHAPTER IV

GUNNISON TUNNEL PRELIMINARIES

Great enterprises move slowly, and oftentimes those benefits which are of the most practical service to mankind, and for which there is the most crying need, are the longest deferred. It is needless, perhaps, to state that the inhabitants of the Uncompahgre Valley have been educated in the school of hardship and self-denial. The country is comparatively new. The Continental Divide casts a separating line between the valley and the thickly populated east. The great Utah desert stretches its parched plains far to the west, and the Uncompahgre Valley seems thrown in between as a sort of haven of rest for those who pass within its borders.

The Uncompahgre Valley contains the largest body of irrigable land in Colorado, lying west of Pueblo, and it has only awaited the magic influence of living streams to

transform it into one of the richest and most fruitful sections of the world. All kinds of fruits except those that are tropical in nature are grown, not in limited quantities, but in profuse abundance. Every vegetable that can be grown outside of the tropics flourishes in the Uncompahgre Valley. The Uncompahgre River generously surrendered its waters to be spread upon the lands, but the supply was soon exhausted, leaving great stretches of country untouched by the shovel and plow.

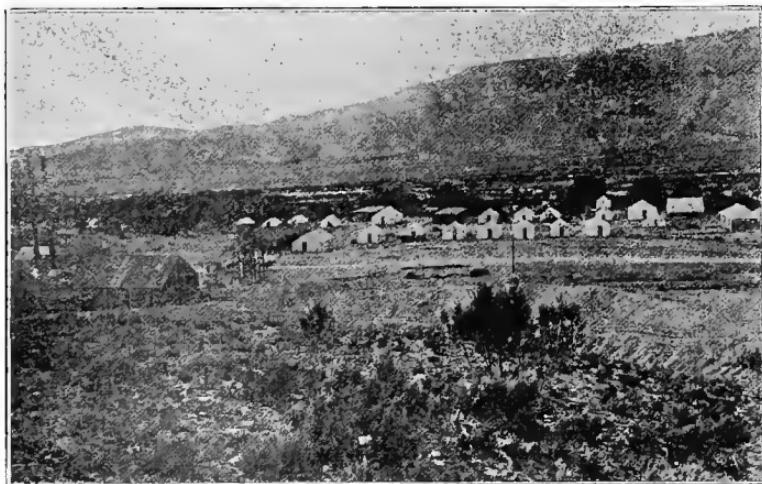
The ripple of the Gunnison River seemed to plead with the people of the valley to tap its inexhaustable treasure of liquid wealth, but the inhabitants of the land were slow to catch the inspiration of the great idea that a hole six miles long could be driven through a mountain chain, through which the crystal stream might be led and caused to distill its liquid treasure upon the parched acres that the valley contained.

At last, a Frenchman, named Lauzon, who had learned the value of water, became convinced that it was not only possible to divert the Gunnison River, but that it was an intensely practical plan besides. In season and out of season, Lauzon talked Gunnison water, in the country school houses, and in the towns on the street corners, and in the highways and byways he pleaded with the people to arise and build. Many were ready to intimate that his mind was turned by constantly brooding upon the subject, but later developments have abundantly vindicated the man's idea and purpose, proving that he was an educator,

filling an appointed place. Posterity will honor the services rendered the Uncompahgre Valley by Mr. Lauzon.

FIRST SURVEYS.

The citizens were at last sufficiently aroused to contribute a small sum for the purpose of making a preliminary



GOVERNMENT CAMP AT VALLEY PORTAL OF GUNNISON
TUNNEL.

survey, and on the twenty-seventh day of August, 1904, Walter Fleming and Richard Whinerah, civil engineers, were directed by the three counties of Ouray, Montrose and Delta to run level lines from the Uncompahgre Valley to the Gunnison River for the purpose of discovering, if possible, how much of the valley lands could be covered by water from the Gunnison. At this time the idea seemed to be that a ditch could be taken out from the canyon, and

that by means of pipes and flumes, the water could be carried over the hills and permitted to drop into the valley.

The first survey proved the impracticability of that enterprise, and while sitting around the camp fire during this first surveying expedition, Fleming and Whinerah fully decided that if the water from the Gunnison River ever flowed into the Uncompahgre Valley it would have to be by means of a hole bored through the mountains. With this fact fastened upon them, they ran a level line from a point eight miles east of Montrose in a north-easterly direction direct to the Gunnison Canyon. They found that the water could be taken out sufficiently high to practically cover all the lands of the valley.

The initiatory step was now taken, and the people were beginning to awaken to the fact that what they had at first scoffed at was a practical possibility, and that it was worth their while to arise and do something, if they ever hoped to see their valley take its rightful place among the productive centers of the west.

LEGISLATIVE PRELIMINARIES.

The Hon. Meade Hainmond of the State Legislature labored untiringly for the Gunnison Tunnel. The first session after his election he was unable to accomplish anything for the great enterprise; but he was re-elected and became a power in the legislative halls upon all questions of state importance, and he succeeded in securing a state

appropriation of twenty-five thousand dollars with which to make preliminary surveys and begin work on the tunnel, hoping by these steps to interest private capital in the enterprise. At this time the people did not dare to hope that it would be made a Government enterprise, and they continued to labor along the line of securing support from private capital, which, had they been successful, would have forever saddled upon the people of the valley a burden that would have been illy borne. However, in the meantime, the Hon. John C. Bell, representative in Congress for that District, labored with untiring zeal to interest the Reclamation Service in the project. He at last secured the appointment of a corps of engineers and field men for the purpose of making exhaustive investigation relative to the enterprise, precursory to the taking on of the project by the Federal Government.

In the meantime, Prof. Fellows had been appointed U. S. District Engineer, and he at once manifested an intense interest in the great enterprise, in fact this soon became the absorbing ambition of his life. To the carrying out of the project he devoted all his energies, and his highest hope was to see the fertile lands of the valley moistened by the crystal waters of the Gunnison.

It is difficult to place the credit for the first agitation bearing on this project upon any one person. Mr. Lauzon was, without doubt, the first man to publicly agitate it as a feasible irrigation project, but it seems that prior to

this time it had been investigated by the Denver & Rio Grande railroad as a practical means of letting their road into the Uncompahgre Valley without having to climb the mountains. The San Juan mining district had also manifested an interest in the project from a power standpoint, it being regarded by some mining engineers as a practical plan for securing electrical power to drive the machinery of that great mining district. Be that as it may, the purpose for which the tunnel was successfully agitated rested upon an irrigation basis, and upon this basis appeals were made to the state, and the assistance of the Government was solicited, which is but another proof of the great fact that back of all commerce stands the farmer as the mighty spoke in the great wheel of industry, and his guarantee alone is sufficient to start the wheels of Government in any enterprise, it matters not how great.

The Gunnison Tunnel and kindred projects are demanded by the times. The whole Great East is filled to overflowing with congested population. Countless acres of fertile land now lie waiting the application of water to transform vast barren wastes into gardens, Edenic in their beauty and productiveness. The restrained thousands in our Eastern states are eagerly seeking some outlet for their overflow population; there is no country so inviting as the homeland, and there is no place in the home land that offers such inducements to homemakers as the great, unsettled west. And what can a great and

Magnanimous Government do but say to its loyal subjects, "We will bring within your reach the means by which you can transform a trackless empire into gardens of fruits and flowers."

The machinery of Government has been put in motion, and in the states of Colorado, Wyoming, New Mexico,



DIGGING CANAL WITH STEAM SHOVEL.

Nevada, Idaho and Arizona the great work of reclaiming the vast arid territory is under way. Colorado was the first to receive benefit under this great movement, and the Uncompahgre Valley is the chosen place that will have opportunity to test the results of the first great irrigation project.

The preliminary steps necessary to any great undertaking are many, and oftentimes complicated. They were

found to be so in the Gunnison Tunnel project. Ten years passed from the time the matter was first agitated, until the project was assured by the arrival of Government assistance. These ten years were marked by many interesting events, brought about by men who dared to sacrifice and do in the interest of the gigantic project. The names of such men as Lauzon, Fleming, Whinerah, Hammond, Bell, Pelton, Torrence, Fellows, Tobin and Dodge can never be separated from the Gunnison Tunnel project. Scores of others stood nobly by the enterprise when it was weak and needed strengthening, but these men were the ones who dared lead out and risk something in behalf of the undertaking.

One of the most daring adventures ever undertaken in behalf of an industrial enterprise was the exploration of Black Canyon of the Gunnison, for the purpose of giving to science and the world the particulars pertaining to the project that the boring of the Gunnison Tunnel involved. In the following chapter the story of the hazardous trip through the canyon is told.



WHERE THE RIVER DISAPPEARS IN BLACK CANYON.



CHAPTER V

THROUGH THE BLACK CANYON

Much has been written about the Royal Gorge of the Arkansas, and the Grand Canyon of the Colorado River, but their towering walls shadow grandeur that must be seen to be appreciated, and their roaring cataracts chant music that must be heard to be understood. Science declared that a railroad was possible through the Royal Gorge, and now ribbons of steel are flecked by the foam of its raging waters throughout its entire length. Years ago daring men braved the gloomy fastness of the Grand Canyon of the Colorado and gave the world the secrets its mighty depths contained. In 1853 Captain Gunnison, a daring pathfinder and explorer of note, discovered the river that bears his name. He found its source in the south central part of Colorado, whence it sought its outlet in a northwesterly direction toward the sea. He followed

its plunging waters down mountain side and through smiling valleys, past forests of stately spruce and pine, and broad meadows of waving grass, until he found it swallowed up in a recess so dark and forbidding that it was named the "Black Canyon," the yawning depths of which he did not care to explore, and so he veered to the left and sought an outlet through a less difficult country, to finally leave his bones with those of his companions to bleach upon the plains of Utah, victims to the cruel hate cf the savage redskins.

In 1873 Prof. Heyden with a surveying party approached and peered into the abysmal depths of the Black Canyon, and filed in his notes that it was inaccessible and passed on.

Thirty years passed by, and none were found daring enough to attempt its exploration from the mere love of adventure; but at last in 1901 science and necessity demanded that its depths be traced and their mysteries given to the world.

To the west, running parallel with the canyon, lies the inviting valley of the Uncompahgre. The white man had found his way to this chosen place, and where once the Indian had hunted the antelope and deer, there were now under the process of development fertile farms and delightful homes. The necessity of procuring a sufficient water supply for the purpose of irrigating the Uncom-pahgre Valley demanded that the seal that bound the mysteries of the Black Canyon be broken, and the nature



TOP OF TORRENCE FALLS.

of its unknown fastness be made known to all. The voice of humanity was heard in earnest appeal for that most important essential, water, with which to irrigate the farms of the Uncompahgre Valley in order that families might be supplied with bread, and homes rendered peaceful and happy that otherwise would not afford the most meager necessities of life.

FIRST TRIP THROUGH THE BLACK CANYON.

Where were the men to hear the call and take their lives in their hands by facing the perils of the Black Canyon in the interest of that project which alone could afford relief to the drouth-stricken inhabitants of the valley? The only hope of securing a sufficient supply of moisture was in some diversion project by which the waters of the Gunnison River could be applied to the fertile but waterless lands.

At last five men were found who accepted the call and who decided to make the perilous attempt at exploring the shrouded caverns of the Black Canyon in the interest of that project which, if successfully accomplished, would be the means of transforming their valley into one of the most beautiful places on earth. J. E. Pelton, J. A. Curtis, M. F. Hovey, E. B. Anderson and W. W. Torrence are the men, and to them the people of the Uncompahgre Valley, and the thousands who will yet locate within its borders, owe a lasting debt of gratitude for that which they dared in their behalf.

The funds with which to equip such an expedition were meagre, but they at last fitted out two boats and sufficient supplies for thirty days, and all arrangements being completed, they started upon their perilous journey, entering the Canyon about one mile above Cimarron Station.

It was arranged that men should be stationed along the brow of the canyon in order to watch the movements of the men below and report each day to their families, as all were men of family except Mr. Torrence. The second day in they lost one of the boats and half of their supplies while attempting to pass a waterfall. That night, exhausted by the constant and excessive battle with the torrent, they found rest in a cave, the depth of which they were unable to explore.

They found it necessary to be much of the time in the water, and there was but little of the time, day or night, that their clothing was dry, or when they were free from that most unpleasant sensation that comes from having on water-soaked clothing.

The canyon was deep and narrow, the water cold and icy, coming, as it does, from melting snow; the walls were perpendicular; and the reverberation caused by the unceasing and mighty roar of the waters made hearing an impossibility, save when in actual contact of mouth and ear.

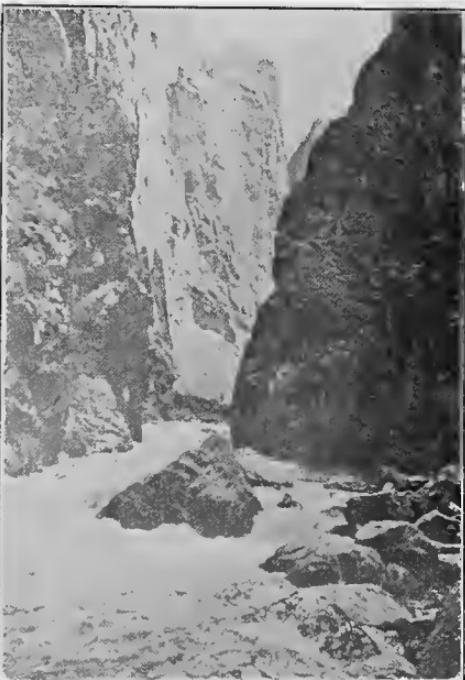
Arrangements had been made to communicate with the top men each day, but five days passed before a single

evidence of their existence was revealed to the men stationed along the top. They were given up as lost, and a messenger was sent to the lower end of the canyon to span the river with wire-netting for the purpose of catching their bodies.

But the fifth day, at a point where the canyon is fifteen hundred feet deep, and the walls are perpendicular, the top men espied them, and the glad news was borne in haste to their families and to the people in general that they were still alive.

The grandeur of the scenes through which they passed has in a measure been brought to general view by the more than eighty views that Mr. Torrence secured while on this trip.

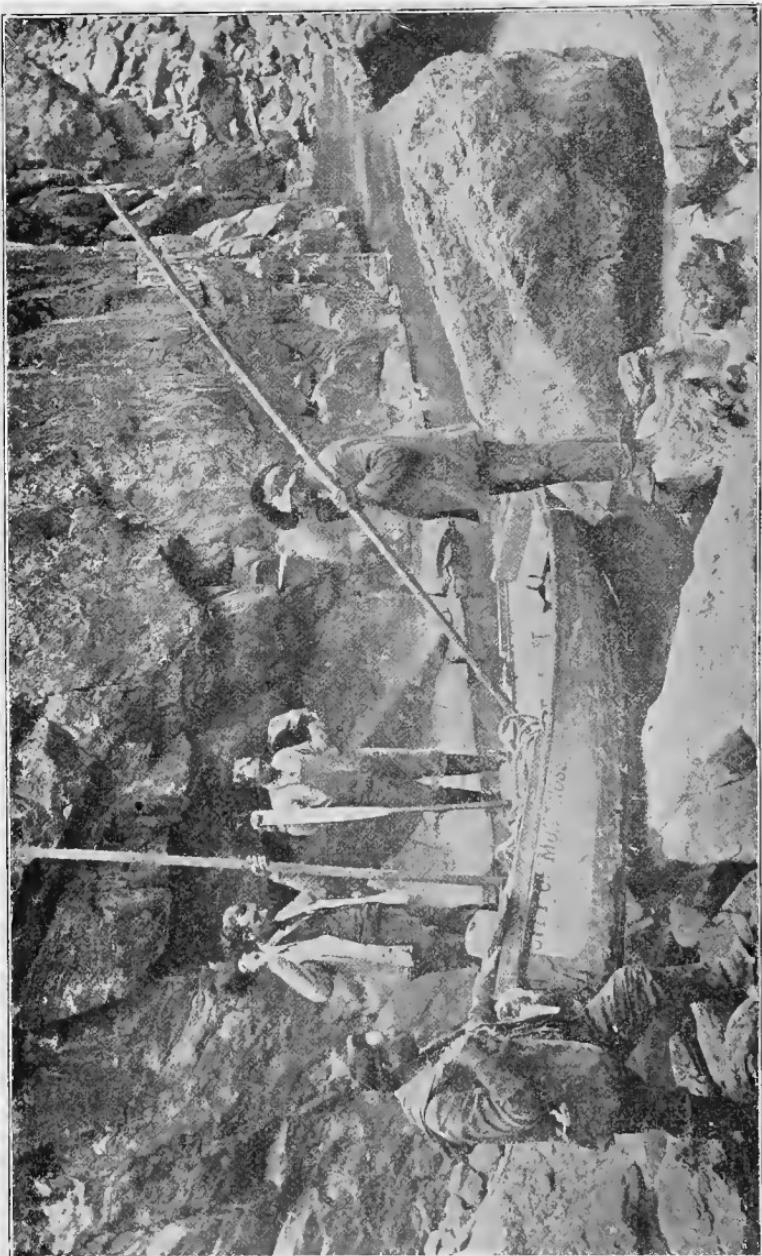
The hardships they endured, while not so great as those endured by Mr. Fellows and Mr. Torrence at a later period, were sufficient to test sinews of iron and try nerves of steel.



At three different places they found natural bridges across the river, formed by immense rock slides, which had some time during the past ages fallen into the canyon, thus causing the water to force its way under the great mass of fallen stone. The needles shown in the illustration on page 17 are sharp spires of solid granite two thousand feet tall.

As the party advanced, the canyon grew deeper and narrower, and the water more rapid and fierce, until the men became convinced that with their equipment they could proceed but little farther, so they began to watch for a place to get out. The canyon was then twenty-three hundred feet deep, the walls straight up and down and very narrow. There were no shores or banks now on which to travel, and the entire party had to take to the water which was so deep and rapid that in many places it seemed as much as life was worth to get into it. After plunging through this narrow place, they came to where boulders as large as houses had fallen into the canyon, and the river disappeared altogether. Here they toiled hard and long, dragging their boat over these great obstacles, only to discover, when safely over, so great a difficulty before them that they were forced to abandon the expedition, without having accomplished the object for which they had risked their lives in an attempt to establish the possibility of diverting the water of the Gunnison River to the lands of the Uncomphagre Valley.

They were confronted by a canyon twenty-five hundred



LEAVING THE LAST BOAT, IN BLACK CANYON.

feet deep, and only twenty-eight feet wide, with perpendicular walls, worn by the action of the water as smooth as glass, and language cannot describe the terrific force with which the restrained torrent found egress through the narrow outlet.

Behind them pressed the raging torrent,
Before them boiled its seething tides,
Above them towered such walls of granite
That wild goats could not scale their sides.

Confronted by this mighty and desperate water sluice, the party realized that it would be folly to attempt to proceed farther, and means of escape were sought for. On the right side of the canyon, looking down the stream, was a narrow opening, which, while appearing almost perpendicular, yet offered the only hope for getting out of the canyon, as it would be impossible to get back the way they had come. They named the narrow place the "Falls of Sorrow," bade farewell to their tried and worn boat, and, having spent twenty-one days in traveling a distance of fourteen miles, they began their ascent out of the mighty depths of the Black Canyon at about eight o'clock in the morning.

They toiled and climbed all day, night finding them far from the summit, with no place to stop for a period of rest. Not until half past nine that night did they at last stand on the summit, exhausted and almost famished from hunger. Their instrument revealed that in climbing the twenty-five hundred feet they had departed only six hun-

dred feet from the river, and they could stand upon the canyon's crest and toss a pebble upon their deserted boat, twenty-five hundred feet below. After reaching the top they were obliged to walk fifteen miles before finding food. The party, intact in number, but depleted in avoir-dupois and equipment, at last reached Montrose, having traveled a distance of one hundred miles in a circuitous route, much of which had never been traversed by man.

**ADVENTURE OF FELLOWS AND TORRENCE IN THE
BLACK CANYON.**

While the expedition did much to interest the public in the diversion of the Gunnison River, it was incomplete in the fact that it failed to establish the feasibility of the undertaking from a scientific standpoint. It was left for Prof. A. L. Fellows of the U. S. Reclamation Service and Mr. W. W. Torrence of Montrose to complete that which the former party had attempted. In August, when the weather was warm and the water would be at a higher temperature than at any other time, they prepared for their perilous undertaking.

The equipment consisted of a rubber raft, rubber bags for kodak, etc., hunting knives and belts, and two silk life lines, six hundred feet long. Thus equipped they started into the canyon to accomplish by means of swimming that which the former party had tried by means of boats.

Their experiences were similar to those of the former party until they reached the Falls of Sorrow, at which



**LOOKING FOR A PLACE TO GET OUT.
UNCOMPAGRE VALLEY-7**

place their most trying experiences began. As before stated, the opening at this place is only twenty-eight feet wide, through which the river goes plunging and tear-



ing at a terrific speed, sending forth a roar like a thousand pieces

of artillery. Through this narrow opening they could see the tops of trees below, the height of which they had no means of knowing, but it was plainly evident that the falls extended a considerable distance. They exhausted every resource in an attempt to get by the falls by climbing, but without success. They spent several hours in trying to slip through by hugging the walls, but the eddy of water would beat them against the rocks so hard that they found their strength waning, without making any progress in their effort to get through.

THROUGH THE NARROWS.

After several hours spent in deliberation, they decided that the only way was to plunge into the middle of the current and trust to their good fortune to take them through. It was a daring resolution, but the only way out of the difficulty. They had but faint assurance that they would get out alive, but casting their all upon that assurance, feeble though it was, they plunged into the maelstrom of water.

Torrence saw Prof. Fellows caught by a mighty billow of water and hurled out of sight. As he disappeared from sight, Mr. Torrence shouted "Good bye," for he never expected to see him again. But Providence decreed otherwise, for after having been hammered and driven and plunged about for some minutes, they at last floated out into less turbulent water and dragged themselves, bruised, bleeding and exhausted, to a friendly boulder, upon which they sought to recover their spent strength.

Having rested awhile, they again took up their journey. Provisions were gone, and they were beginning to feel the pangs of hunger. They could not get out, neither could they go back; they must go on, not knowing what was before them, nor what unexpected trials would at any time confront them. The question of how to satisfy the demands of hunger was rapidly becoming an important one, when quite unexpectedly they started a pair of mountain sheep.



A HARD PLACE TO SWIM.

CATCHING A MOUNTAIN SHEEP.

No animal that ranges the Rocky Mountains is so difficult of approach as the mountain sheep. He seeks the most secluded places that can be found, and it is but seldom that he permits himself to be seen by the sharpest



eyed hunters. One of these went bounding away over the rocks and cliffs, where it was impossible for man to even get a footing, and the other ran in between two jutting rocks. Torrence ran to the opening, just as the animal made a plunge to get out, and it fairly leaped into his open arms. Then began a mighty struggle for the mastery. The wild sheep was between the two men and apparent starvation, and with all the strength of his un-

tamed nature the desperate animal sought to escape. After a long struggle, Torrence succeeded in stabbing it to death, and they at once



CARRYING SUPPLIES OVER RAPIDS.

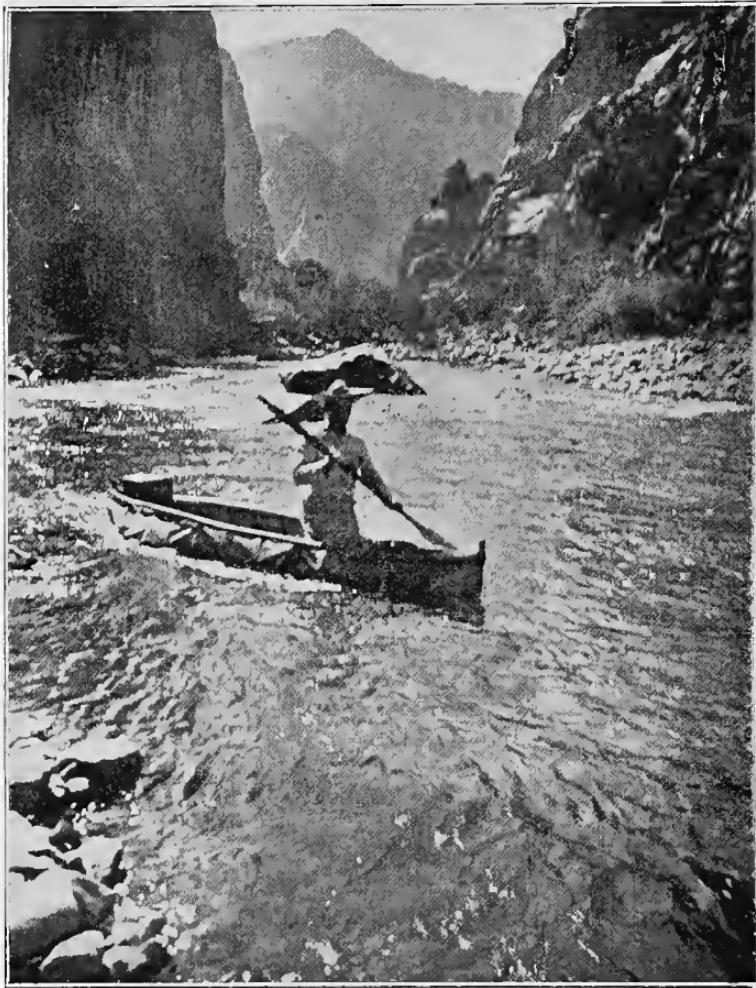


prepared a feast from a portion of the carcass. Perhaps never before in the history of man's knowledge of this animal had

anyone succeeded in catching a full grown mountain sheep alive in his arms.

UNDER THE CAVE-IN.

The next trying place was where the canyon had been obstructed by a vast deposit of huge boulders, under which the water has worn its way. The action of the torrent had worn the hard blocks of granite until they had the appearance of resting upon pillars. The two explorers could find no way of getting over the obstruction, the deposit was piled so high, and the boulders were so large that they could find no footing by which to climb up. The canyon was two thousand feet deep at this point, no place could be found where they could climb out, and no human being could get back through the whirling torrent behind them. There was but one way out, and that was through the hidden archway with its foaming waters. They had no means of knowing the extent of the cave-in, nor how narrow were the openings through which the waters found an outlet; they could peer in vain into its roaring depths, but could behold nothing but darkness; they could hear nothing but the constant roar of the cataract. After spending a long time in deliberation, they at last decided to attempt to go with the boiling waters into the unknown depths of the foam-flecked cavern. Contact with constant peril had made the pair indifferent to their personal safety, and Fellows slid off the rock on which they were sitting, into the whirlpool of water beneath. Torrence



SHOOTING THE RAPIDS IN BLACK CANYON.

saw him turned over as soon as he struck the water, and as he shot under the archway all that could be seen of him was one of his feet whirling around in the mad torrent. Again Torrence did not expect to ever meet him alive, and

for a long time sat there before he could decide to court what seemed to be the certain fate of his companion. At last, it being the only alternative that presented a single hope for life, he, too, plunged in, but profiting by the manner in which Fellows had gone under, he attempted to strike the water in a position to swim and in this way succeed in keeping on top of the water, and while the terrible force of the torrent shot him under the arch at a frightful pace he was afloat. He found the greatest danger in the waters dashing him against the jutting rocks, and thus rendering him unconscious. He finally got through, and crawling upon a rock he looked down stream and saw Prof. Fellows on another rock waiting for him to come out, at the same time regaining his strength.

After this experience they soon reached Red Rock Canyon, where they found a man waiting for them.

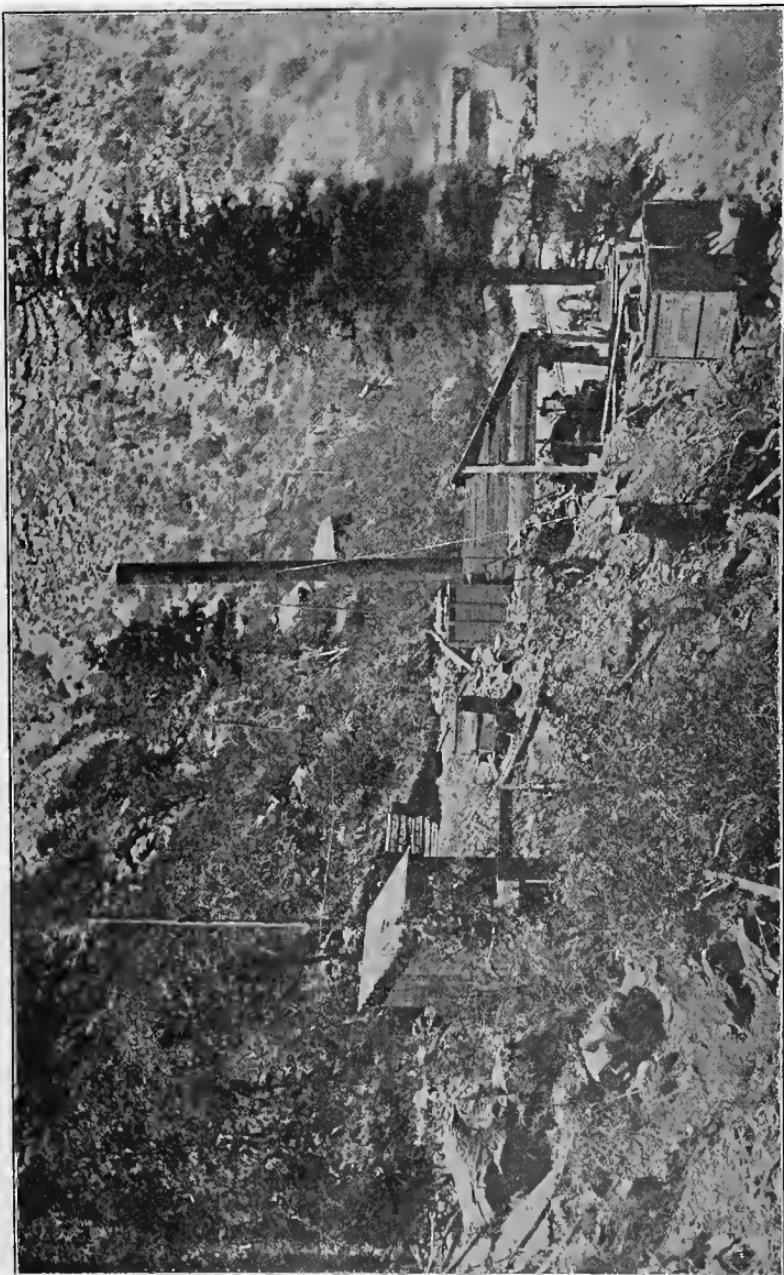
After a good rest they again plunged into the Canyon, but their hardest experiences were over and they soon emerged from the mouth of the famous Black Canyon, having traversed its entire length of thirty miles in a period of ten days, during which time they swam the river seventy-two times, and passed through experiences, out of which it seemed nothing short of miraculous that they emerged alive. In all probability no one will ever again attempt its perilous passage. The purpose for which they made the hazardous journey is accomplished. The great Gunnison Tunnel is assured. Under Government control, night and day is heard the chuck,



AFTER WE GOT OUT OF THE CANYON.

chuck of the air drill as it drives bars of steel through the mountain of granite that separates the sparkling waters of the Gunnison from the productive lands of the Uncompahgre Valley.

GOVERNMENT WORKS AT RIVER PORTAL OF GUNNISON TUNNEL.





SECTION OF COMPLETED CANAL.

CHAPTER VI

THE GUNNISON TUNNEL

All preliminaries connected with the great Gunnison Tunnel project were carefully detailed and considered by the Government before any decisive action was taken upon the important undertaking. There were many important details to be worked out and determined before Government control could be assured.

1. The Government had to be assured, by means of thorough surveys, that the tunnel was a practical undertaking from an engineering standpoint, and that its cost would not exceed the value of the lands to be reclaimed.
2. The unanimous endorsement of the inhabitants of the valley had to be procured before the Government would consider the project at all.

3. A reasonable guarantee was demanded from all land owners before practical operation would be undertaken.

The arranging of these details required time and a prodigious amount of labor before matters could be arranged to the absolute satisfaction of all concerned. Representatives of the people in association with representatives of the Reclamation Service were successful, however, in establishing on a permanent basis the voluminous detail connected with so large an enterprise, and on the fifth day of October, 1904, bids for the construction of the great bore were opened.

At this writing (1905) the work is being vigorously pushed at both ends, and also, by means of a shaft, through which the work is being driven both ways. The tunnel is thus being worked from four breasts, by which means it is being pushed as rapidly as possible.

The valley portal of the tunnel is located eight miles east of Montrose, near the little station of Cedar Creek, a small shipping point on the Denver & Rio Grande railroad. The tunnel enters the valley at an elevation of about 6000 feet. The river portal of the tunnel is reached by a magnificent roadway, twelve miles long, which was built by the Government at a cost of several thousand dollars. This road was built for the purpose of conveying machinery and supplies for construction at the river end of the great bore.

PREPARATORY ORGANIZATION FOR THE GUNNISON TUNNEL.

"The Gunnison Tunnel cannot be discussed as the work of any one man, or one set of men. It is the result of a united effort, supported and made effective by a beneficent national act.

"For the administration of the completed project, the officials of the Reclamation Service have directed the establishment of the Uncompahgre Valley Water Users' Association. This Association is entrusted with the adjustment of conflicting rights, and the return of the cost to the Reclamation fund. At the proper time, also, the Association will assume control of the entire irrigation project.

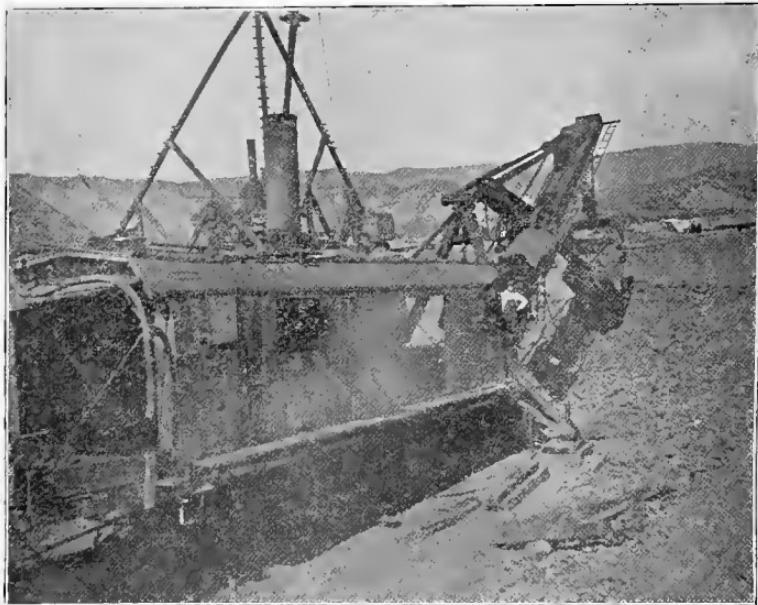
"The task ahead is no small one for the officers, but they are going forward with energy, and will achieve complete success. The Association is directed at present by the following officers: J. H. Halley, president; John Tobin, vice-president; Ira H. Monell, secretary; W. O. Stephens, treasurer; John Lamb, E. L. Ross, O. M. Kem, Frank Donlavy, W. E. Obert, W. R. Welch and Frank Ross, directors."

DESCRIPTION OF TUNNEL AND DITCH CONSTRUCTION.

"The constructions involved in the Uncompahgre Valley project are the following:

"First:—The Gunnison Tunnel, for the diversion of the Gunnison River through the separating ridge into the Uncompahgre Valley. The tunnel will be 30,600 feet in

length and 11x13 feet in cross section and will be lined with concrete from end to end. It will be provided with massive headgates at the upper end to regulate the flow of water, and to prevent destruction during times of flood.



STEAM SHOVEL EXCAVATING CANAL.

The tunnel will cut the mountain at a depth of 2,100 feet, and the 1,300 cubic feet of water turned in at its headgate will pass through it at a rate of ten and one-half feet per second of time. Some idea of its magnitude may be obtained from the fact that the project involves the removal of 5,212,600 cubic feet of shale and granite from the tunnel alone. Its cost with its accessory works is estimated at \$1,200,000.



ENTRANCE TO TUNNEL.

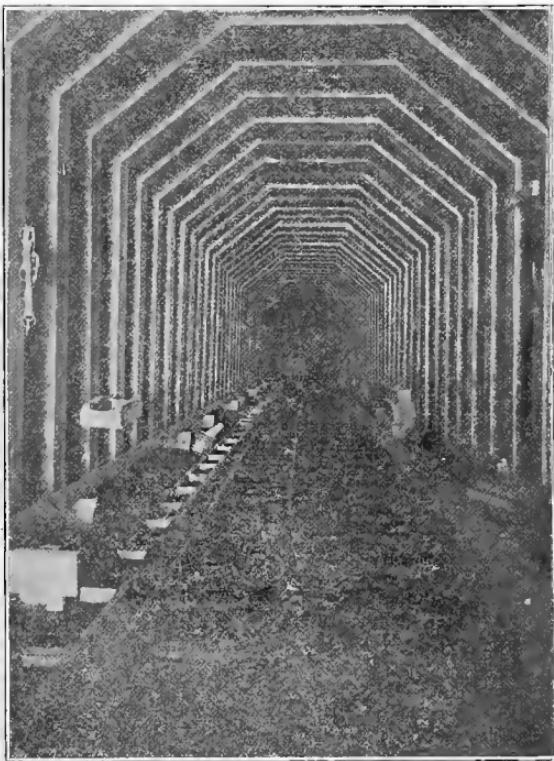
"Second:—South Canal to carry the waters from the Gunnison tunnel to the Uncompahgre River. This canal, twelve miles in length, will be thirty feet wide at the bottom, seventy feet wide at the water surface and ten feet deep. It will contain numerous drops or artificial falls and other structures which will be built of solid masonry, in the most substantial manner. It is estimated that these drops will produce power to the amount of 6,000 horse. It will be provided with a lateral system, for the distribution of water to about 20,000 acres of land. Its total cost is estimated at \$500,000.

"Third:—West Canal to irrigate the lands west of the Uncompahgre River. This canal will irrigate about 65,000 acres of land. It will furnish water for approximately two hundred miles of distributing laterals. The headgates at the Uncompahgre River, with numerous drops, and the diverting gates for laterals, will be massive and substantial structures. The total cost will probably not be less than \$500,000.

"Fourth:—East Canal to irrigate the lands east of the Uncompahgre River and north of Montrose. This canal will be about twenty-five miles long and will irrigate about 65,000 acres of land. Practically all of its required laterals must be built, as it waters a region almost wholly desert. Upwards of one hundred and fifty miles of laterals will be required. The total cost will reach \$500,000 approximately.

"The construction of a great project involves many

uncertainties. As the work progresses, new possibilities and new difficulties continually develop. It is fitting that such enterprises should be taken up by the nation, which is able to meet all contingencies, and which proceeds upon



INTERIOR OF GUNNISON TUNNEL.

the theory that the actual home-builder must be the one benefited, and that maximum utility of available waters must be the controlling factor.

"The completion of the Uncompahgre Valley project

will mark the dawn of a new era for the valley. Provided by a wise law and guarded by trained and disinterested officials, it will stand as a guarantee to every man of a square deal. Under the terms of the Reclamation Act, payments are distributed over ten years, without interest. If past experiences are any guide, the portion of the crop required to meet these payments will be a small percentage of the total yield. At the end of ten years the system should be better than when it was built, and the annual maintenance charges should be so low as to be comparatively trivial.

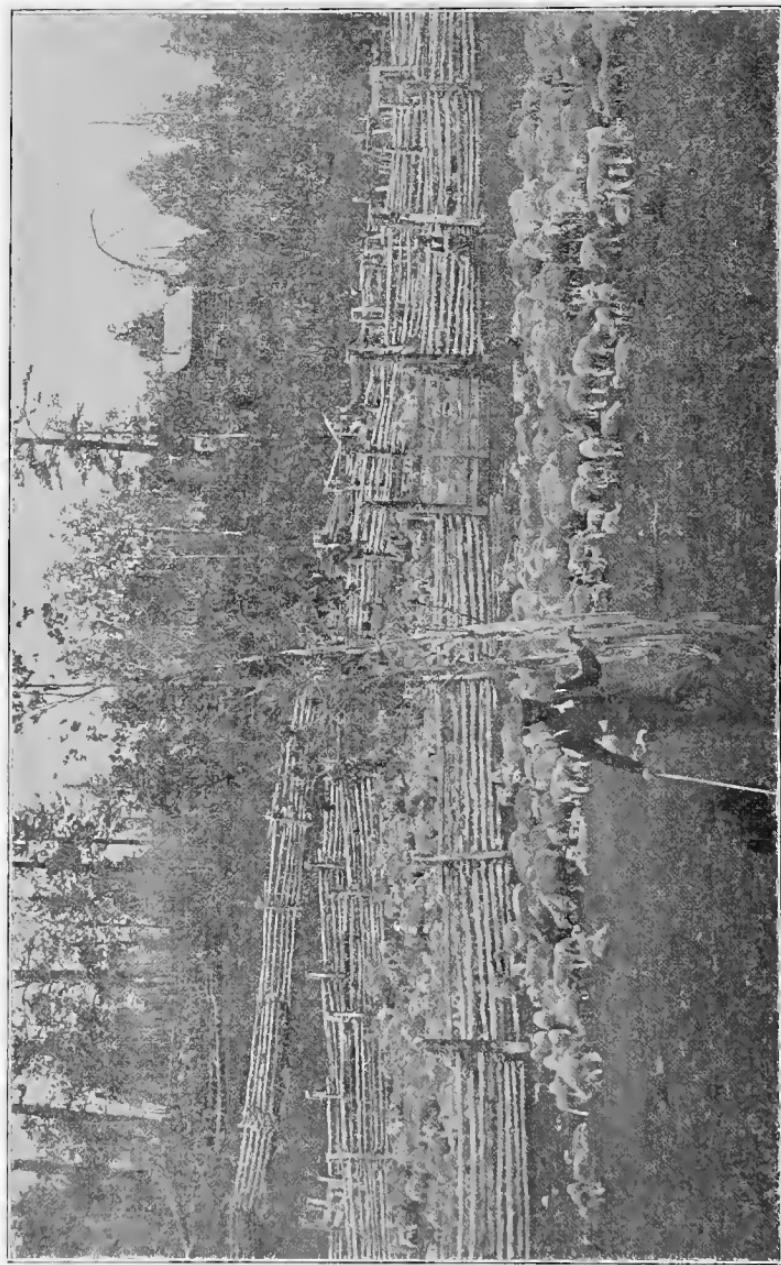
"Sheltered on all sides by mountain ranges of Alpine grandeur, favored by a climate of rare equableness, supported by a soil of surpassing fertility, the Uncompahgre Valley rests under a rainbow of promise of rarest hue. It needs no dreamer's eye to behold in the near future the fields of waving grain, the herds of well-fed animals, the bounteous orchards, all contributing to the happiness of contented, prosperous citizens. The practice of irrigation necessitates intelligence. The successful farmer in communities where economic conditions call for intensified farming in its highest degree, must bring to his aid all the forces of modern science. Consequently, we shall find here in this spot, especially favored by nature, a community prosperous in material goods, rich in education, fertile in imagination—a veritable tower of strength against the storms of prejudice, passion and injustice which pervade the nation at intervals. Here we shall

find the ideal man, strong in body, keen of intellect, deep-souled, full-hearted and unafraid."

Note.—The paragraphs in this chapter marked as quoted are to be credited to Mr. I. W. McConnell, engineer, in charge of the construction of the Gunnison Tunnel.

AUTHOR.





SHEEP CORRALS SOUTH OF HORSEFLY MESA.



BIRDS-EYE-VIEW OF OLATHE, EAST MESA IN THE DISTANCE.

CHAPTER VII

TOWNS AND INDUSTRIES OF UNCOMPAHGRE VALLEY

The Uncompahgre Valley is situated in Montrose and Delta counties, about two-thirds of the valley lying in Montrose County.

Montrose is the county seat of Montrose County, and Delta is the county seat of Delta County. The towns are twenty-two miles apart, and Olathe lies about half way between in Montrose County. Olathe possesses the greatest acreage of good lands to be occupied with the advent of Gunnison water.

CITY OF MONTROSE.

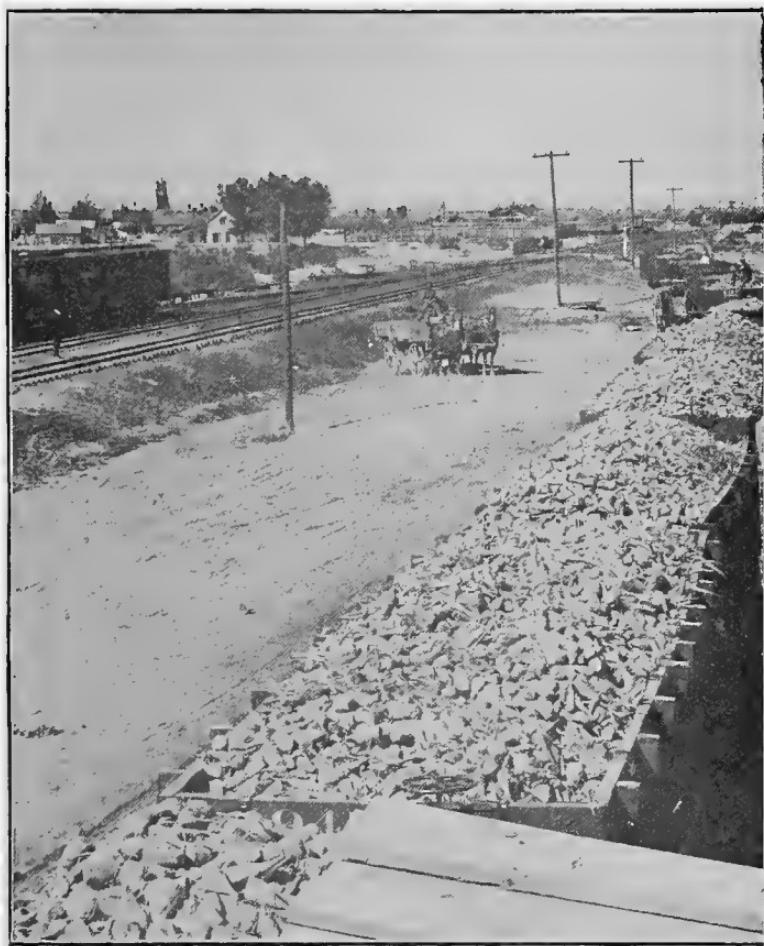
Montrose is located at the upper end of the Uncompahgre Valley, in about the center of Montrose County

north and south. Its present population is about three thousand, with every prospect for a large and permanent growth during the coming five years. It is at the present time enjoying quite a marked degree of building activity. There is good reason for this. It is the headquarters for the Gunnison Tunnel project, and provides most of the supplies for that enterprise. Being thus situated, it is not surprising that it should receive the first impetus of prosperity that reaches the valley; but for permanent development and favorable surroundings, Montrose possesses no advantage over Olathe or Delta.

By September 15, 1905, Montrose will have completed a water system which will afford the city an unfailing supply of pure, soft mountain water. This water supply will be piped fifteen miles at a cost of \$75,000, for which outlay bonds have recently been voted. The supply is designed to be ample to answer the requirements of a city of 10,000 population.

Many fine business blocks have recently been constructed in Montrose and a number more are under process of construction. The Government is erecting a large building for the accommodation of the Reclamation Service during the time of the construction of the tunnel.

The enterprises surrounding Montrose are similar to those found in all prosperous farming and fruit growing districts. A creamery, canning factory, beet sugar factory and evaporator are either under process of construction or in contemplation for Montrose in the near future.



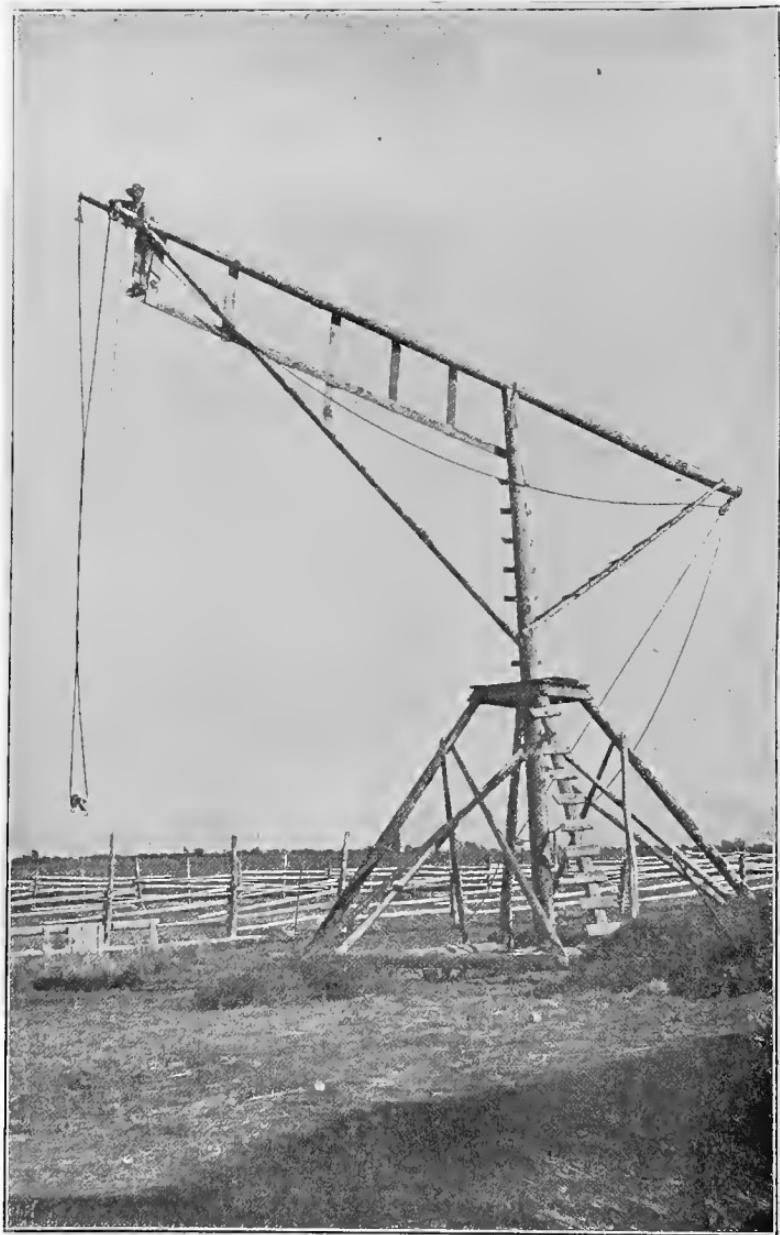
A TRAIN LOAD OF BEETS.

Montrose is the junction for the San Juan branch of the Rio Grande Railway, which taps the great mining districts of the San Juan. The mining industry is a source of constant revenue to Montrose, and to the inhabitants of the entire Uncompahgre Valley as well.

SURROUNDING TERRITORY.

The territory surrounding Montrose is largely mesa in character, only a small per cent of the irrigable lands lying in the bottom. The lands lying on the east side of the Uncompahgre River, and east and north of Montrose, are gray adobe in nature. This land is noted for its inexhaustible strength, the soil varying in depth from five to one hundred feet. The gray adobe requires but little water for irrigation purposes, the nature of the underlying strata being such as to conserve the moisture applied, for an indefinite time. Large crops of grain and alfalfa are produced with but two irrigations, and three irrigations are sufficient for any crop grown on adobe soil. This land is also adapted to beet culture, producing in 1904 some of the largest and richest beets grown in the valley.

The question in the Uncompahgre Valley is not what will the lands produce, but to what special crop are the different soils best adapted. The lands will grow anything adapted to the climate, when properly planted, and the question to be settled by every farmer is, what will my farm produce to the best advantage. If a man desires to be a specialist and devote his time to the development of one product, he will find no difficulty in the Uncompahgre Valley in procuring lands especially adapted to his desire. If he desires to operate on the lines of diversified farming, he can find soil that would appear to have been prepared by the Creator for the elaborate growth of every product under the sun.



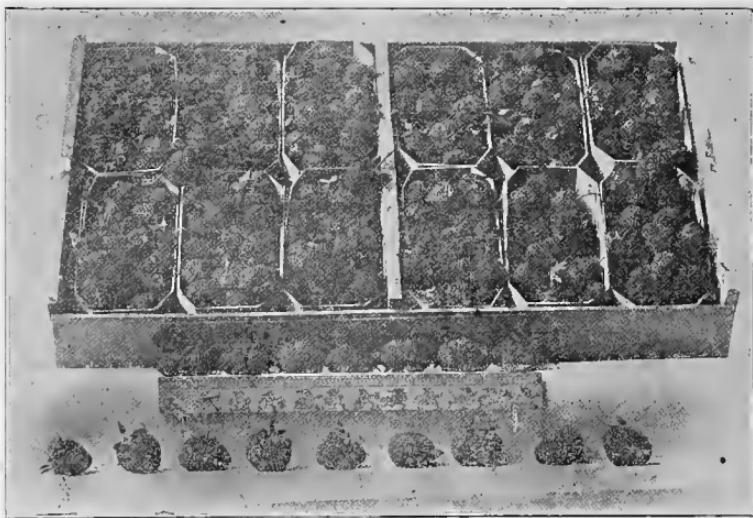
FOR STACKING ALFALFA.

The west side of the river is divided into mesas, named according to their respective locations. Beginning at the upper end of the valley, the first is Horsefly Mesa, which contains about 5,000 acres of irrigable lands. These lands are chocolate colored clay and red gravelly loam. They have a gravel subsoil, and therefore possess excellent drainage. They are adapted to all products grown in the valley, the gravel loam being especially adapted to fruit culture. Practically all this land is under cultivation, although a large portion of it is farmed under very imperfect water rights.

Spring Creek Mesa is the next body of land in order of description, adjoining the Horsefly lands on the northwest, and lying directly west of Montrose. Spring Creek Mesa contains about 12,000 acres of good land, and is the fruit Eden of all territory adjacent to Montrose. Its lands are chiefly red sandy loam, and some of the finest orchards in Colorado are located there. The Ashenfelter Orchards, which are said to be the largest in the state, are located on the brow of this mesa. These orchards contain about three hundred and sixty acres of every variety of fruit grown in the valley, including a large vineyard and strawberry garden. The orchard is laid out in forty-acre tracts, and is just coming into good bearing. In 1904 it proved a source of large revenue to the owner. Ex-Congressman John C. Bell owns and operates a large orchard on this mesa, also Ex-Congressman O. M. Kem.

Coal Creek Basin adjoins Spring Creek Mesa on the

west and contains land of superior excellence. The soil is red sandy loam, of great depth, and will not bake upon the application of water and the heat of the sun. Coal Creek has never known what it means to have a sufficient supply of water, but when Gunnison water is turned upon its lands it will become one of the most fruitful and fa-



CRATE OF STRAWBERRIES FROM UNCOMPAHGRE VALLEY.

vored sections of the Uncompahgre Valley. This basin contains approximately 2,000 acres of fertile land.

California Mesa contains the greatest body of land to be occupied under the Gunnison Tunnel project, and the sun never shone on richer or more productive soil. The land is red sandy loam, adapted to the growing of all products, and, like the fabulous Phenix of the desert, for-

ever renews its youth. This mesa is designed to become a most desirable place; beautiful for situation, it only wants the magic touch of the crystal flow to transform its thousands of untouched acres into garden homes that can not be surpassed for ideal beauty and comfort. California Mesa has within its borders 40,000 acres of productive land.

Ash Mesa lies between California Mesa and the Uncompahgre River, joining California Mesa on the east and overlooking the beautiful town of Olathe. Its soil is much the same as that found on the California Mesa, red sandy loam, with a limited amount of red gravel loam, which is the ideal fruit land. This mesa contains 6,000 acres of land, practically all of which will be cultivated when sufficient water arrives. Ash Mesa and the upper half of California Mesa are tributary to Olathe.

OLATHE.

Olathe is located on the Denver & Rio Grande Railway, half way between Montrose and Delta, and has a population of two hundred and fifty. It is surrounded by an extensive body of amazingly fertile land, and is the home of Mr. Horton, who produced the fabulous crop of onions which is mentioned elsewhere in this book. Mr. Picker, who exhibited one hundred and seventeen varieties of vegetables at the Western Slope Fair at Montrose in 1904, also lives at Olathe. These vegetables were all produced on his small garden adjacent to the town.

Olathe is favored in possessing an intelligent and progressive body of business men, and a wide awake newspaper. There is no reason why it should not become a town of considerable size and importance. Lying east of Olathe is a large body of adobe land, which at the present time is unoccupied, owing to the lack of sufficient water, but this will undoubtedly become the greatest grain and hay producing section of the valley. From the overflow of prosperity that is headed for the Uncompahgre Valley, Olathe will receive a just apportionment, owing to its favorable situation and surroundings.

DELTA.

Delta lies in the extreme northern end of the Uncompahgre Valley, at the confluence of the Uncompahgre and Gunnison rivers; hence the name Delta. It has an estimated population of two thousand, and is the outlet for the great fruit districts of Paonia, Hotchkiss, and Cedar Edge. These fruit lands are famous all over the world, and all are located in Delta County. This section has a bountiful supply of water and has no peer in the matter of fruit production. It stands as a monument of evidence for what the Uncompahgre Valley will speedily become when plenty of water is supplied to its lands. The Gunnison River flows by Delta on the north, and the valley that skirts its borders on either side has an unfailing water supply.

The elevation of Delta is 4,970 feet. The winters are

mild and free from blizzards or hard storms of any kind, and with other places in the Uncompahgre Valley is favored with an unusual amount of winter sunshine.

Delta lies at the foot of Grand Mesa, which is the highest mesa in the world, and one of the most delightful summer resorts in the west. Its surface is dotted with about



SACKS OF ONIONS ON O. H. HORTON'S RANCH,
OLATHE, COL., 1905

three hundred unfailing lakes, many of which teem with mountain trout. Every species of game that abounds in the wilds of the Rocky Mountains is found here, and all things considered, Grand Mesa is the sportsman's paradise.

Delta has completed one of the finest water systems to be found in the United States. It draws its water supply

from springs located on Grand Mesa, at an elevation of 9,200 feet. This water comes from the pure snow that falls in that altitude. It runs in an open stream for a short distance, and then sinks into the ground and finds an underground course for a distance of about one mile, when it again rises to the surface, and from that point it is piped to the city. It thus becomes filtered snow water, and is bound to be the purest that can be obtained. Too much cannot be said in just laudation of Delta's water system.

SURROUNDING TERRITORY.

The lands surrounding Delta are similar to the lands adjacent to the other towns of the valley. About 12,000 acres of the lower California Mesa is tributary to Delta, the larger portion of which cannot be utilized until the arrival of Gunnison water. A portion of Ash Mesa is also tributary to Delta.

Garnet Mesa lies adjoining Delta on the east and contains approximately 35,000 acres of unexcelled fruit lands. It is red sandy loam, and within its borders are found some of the finest orchards in the valley. In 1904 Mr. Switzer, an orchardist in this mesa, produced and sold from one hundred and fifty Elberta peach trees 3,100 boxes of peaches, which netted him forty-two and one-half cents per box, making his land produce a little more than \$1,300.00 per acre. Other orchardists, when conditions are favorable, do equally as well.

Peach Valley lies to the east and beyond Garnet Mesa, and contains about 3,000 acres of adobe land, especially adapted to grain and hay production. This valley is practically unfarmed, owing to insufficient water supply.



SUGAR BEET HARVEST (1905) WAITING FOR THE CARS
AT OLATHE, COL.

South of Peach Valley lies a large section of country known as "Poverty Flats," which contains about 10,000 acres of rich adobe land, a portion of which tract is tributary to Delta, the remainder belonging to Olathe.

Equally divided between the three towns are about 10,000 acres of river bottom lands. These lands are a rich, black, sandy loam, with no limitation upon their productive possibilities. Much of this land is yet to be cleared

from a tangle of underbrush and cottonwood, but when once cleared and in perfect condition and cultivation it is difficult to place a real valuation upon it.

The remaining territory to be reclaimed by the Gunnison tunnel project lies on the east side of the Uncompahgre River, farther back than any of the lands named above, and skirts the foothills from Montrose to Delta. It is all excellent land, and will make ideal grain and hay farms.

But little labor is required to prepare the mesa lands for cultivation. They are usually covered with a short growth of white sage brush, which is easily removed, after which the land may be plowed without difficulty.

There is but little desirable Government land yet to be located in the Uncompahgre Valley. The land is practically all taken up, but many homesteads may be bought at a nominal figure.

PRICES OF LAND IN THE UNCOMPAHGRE VALLEY.

Before stating prices at which lands may be procured in the Uncompahgre Valley, it will be well to compare prices of land in some of the adjacent valleys, which are no better situated than the Uncompahgre Valley, but which have been blessed with an abundant water supply for irrigation purposes. For instance, the Arkansas Valley is located about half way between the Uncompahgre Valley and Denver, on the Arkansas River, at the mouth of the Royal Gorge. This valley has from the beginning

enjoyed an abundant water supply, and their raw lands are now selling for \$300.00 per acre. Garden lands under a fair state of cultivation are going at \$600.00 per acre, and orchards in good bearing are worth from \$1,000 to \$2,000 per acre, and sales are not slow at that price. At Paonia, another section possessing an unfailing water sup-



LOADING FRUIT ON THE CARS AT OLATHE.

ply, located sixty miles north of Montrose, in Delta County, and not so favorably located as the Uncompahgre Valley for market privileges, finds a market for its orchards at \$1,000 per acre, and such orchards are paying from ten to twelve and a half per cent on the investment. The unimproved lands are sought for at \$250 per acre.

With the arrival of the unfailing water supply that the Gunnison Tunnel will bring, the Uncompahgre Valley

will do all that these other valleys have done already, and will be as much greater and grander as its territory is more extensive.

Unimproved lands in the Uncompahgre Valley can now (1905) be bought at prices ranging from \$10 to \$25 per acre. These lands are not inferior in quality or location, but they are not farmed simply because there is yet no water to supply them with moisture. Where there is now nothing but sage brush, cactus and prairie dogs, will be seen, upon the arrival of Gunnison water, farms, gardens and orchards, blossoming as a rose.

Good farms with fair water right may now be procured at \$50 per acre. The best farms possessing good water rights are going at \$100 per acre, while orchards in full bearing are worth from \$100 to \$500 per acre. We venture to say that within three years after the application of Gunnison water there will be no \$100 lands to be procured.

Situated in a climate that is all that can be desired, surrounded by scenery that will never grow old, kissed by the pure, sweet sunshine that forever smiles upon it, exhilarated by mountain breath exempt from germs of disease, the Uncompahgre Valley is a place set apart, favored above most of its kind, and designed to become famous wherever luxuries are enjoyed. The inhabitants have a good thing; they have enough and to spare, and at the present time are ready to share at a nominal price with those who are not so favorably situated.

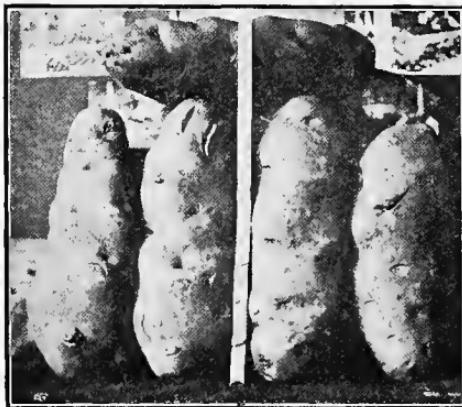
The population of the Uncompahgre Valley, including Montrose, Olathe and Delta, is approximately 10,000. When supplied with water the valley will support in comfort 75,000 people.

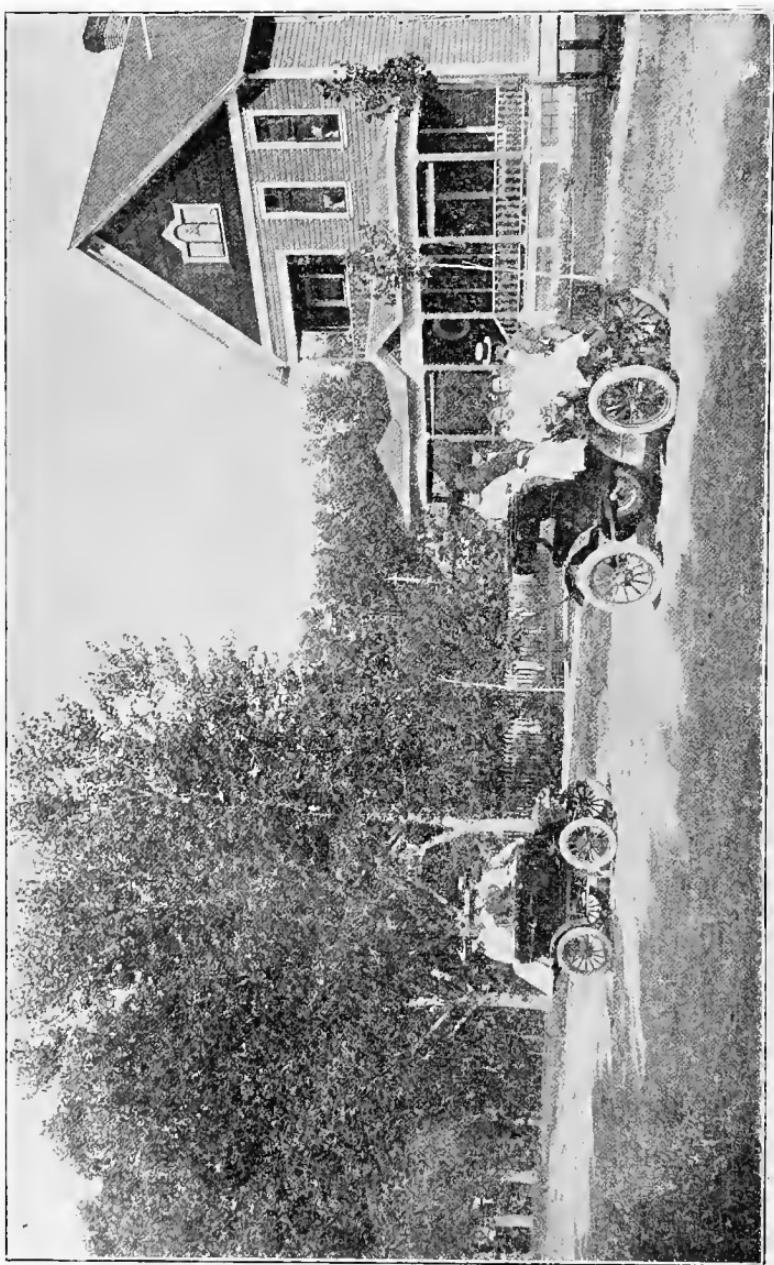
Every inch of available water is at the present time utilized, and there is no possible opportunity to increase



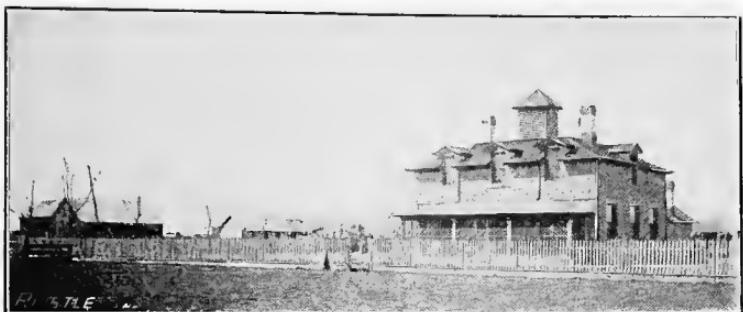
the cultivated acreage until the Gunnison Tunnel is completed. We would advise persons dependent upon the annual products of their land for a livelihood to wait until 1907 before attempting to make a living upon the arid lands of the valley. The Gunnison water is expected to be running in the ditches in the spring of 1908 and not until that time can there be any increase in the farmed acreage.

To those who have means to invest in Uncompahgre Valley lands, we say that no better time will be found than the present to invest in a prospective home at an insignificant sum. Thousands of acres can be purchased at the present time for \$10 per acre, and nothing can prevent the same land from being worth \$100, as soon as the water from the Gunnison River flows upon it. It can readily be seen that the Government would never have undertaken such a gigantic enterprise, had it not, after a most exhaustive investigation, become thoroughly convinced concerning the merit of the land to be reclaimed.





A HOME SCENE IN THE UNCOMPAGRE VALLEY.



CHAPTER VIII

EDUCATIONAL ADVANTAGES

Continuous progress has marked the development of education in the Uncompahgre Valley. No means by which established methods may be improved are neglected.

The country population of the valley is approximately 5,000. The valley supports nineteen country school houses, and a number of them employ two teachers. All these schools are graded, taking the students through the eighth grade. As shown in the illustrations, the buildings are large, substantial brick and frame structures, scientifically and tastefully constructed. In most of these school houses some religious denomination holds forth, and Sunday schools are conducted.

The best educators that can be procured are employed at salaries ranging from \$60.00 to \$70.00 per month.

The best criterion by which to judge a people, their progress and stability, is their literary attainment. The inhabitants of the Uncompahgre Valley are a literary people. Many homes contain collections of books that would do credit to older and more fully developed sections.

There are good reasons why education in Colorado should reach a high standard of proficiency. The climatic conditions are such that impart a degree of energy that the more oppressive climate of the East and South does not afford. While the people are energetic and progressive, the agricultural lands and the mines richly respond to the hand of labor; therefore an excessive amount of toil is not demanded in order to produce the comforts of life.

Ten hours constitute a day's labor in the Uncompahgre Valley, and for this service the farmhand is paid from \$30.00 to \$45.00 per month, according to his ability.

The mines, which are easy of access from all farming districts of Colorado, pay their employes from \$3.00 to \$4.00 per day of eight hours. This easy method of labor affords all who toil ample time for mental recreation and development.

The towns of the Uncompahgre Valley and the surrounding mining sections, as well as most of the country school houses, possess good libraries, to which they are constantly adding.

Montrose has exceptional school facilities. The town

school has an enrollment of 800 pupils, and employs sixteen teachers. The principal of the school receives \$1,200.00 a year for his services, and all grade teachers are paid \$70.00 per month. This school carries the pupil through the twelfth grade. All text books are supplied from the school fund, and attendance is compulsory be-



PASTIMES FOR BOYS IN THE WEST.

tween the ages of eight and fourteen years. A five-room building is under process of construction, for the purpose of accommodating the overflow until such time as permanent buildings can be erected. A manual training school is being arranged for, the citizens of Montrose having subscribed the funds necessary to begin the enterprise.

The county high school is located at Montrose, and

was erected in 1904. It is a substantial brick structure, and has an enrollment of 150 pupils. The high school employs four teachers, paying the principal \$1,200.00 a year, his assistant receives \$900.00 a year, and the two other teachers are paid \$765.00 a year. The building occupies a block of nicely shaded ground in a desirable part of the city, and has a well equipped laboratory. The building is so constructed that it can be added to as necessity demands.

Olathe has ample school facilities, having an enrollment of ninety pupils, for which three teachers are employed. Their two-story school building was erected in 1897. The Olathe people pay their principal \$90.00 a month, the intermediate teacher \$65.00 a month and the primary instructor \$60.00 a month for her services. All schools maintain a school year of nine months.

The school system of Delta and Delta county is as perfect as human skill can devise. The town school has an enrollment of 700, and fifteen teachers are employed to care for this flock, salaried at \$60.00 a month each.

The county high school, located at Delta, has an enrollment of 105 students; for the training of these pupils five teachers are employed. The principal receives \$100.00 a month, and the four other high school teachers are paid \$75.00 a month for their services.

In 1904 Delta had invested in its school buildings the sum of \$72,073.00. The same year the county paid its instructors the sum of \$55,486.00.

The majority of teachers in the Uncompahgre Valley hold first grade certificates, a small number have second grade certifi-



SOME COUNTRY SCHOOL HOUSES.

ley will be maintained. So long as the present standard of progress and enterprise retains its hold upon the people the responsibility of training the children and youth will be carefully safeguarded.

THE LABOR PROBLEM.

It will be well here to speak of the labor agitation that has recently swept throughout the state. We have sometimes felt that our Eastern neighbors were not in a position to understand the situation in Colorado.

Colorado possesses the greatest number of diversified industries of any section in the United States. These industries are not incipient and struggling in nature, but

cates, and but three teachers hold third grade.

It is perhaps needless to say that the standard of education in the Uncompahgre Val-

are vast organizations of power and influence, which are pouring millions of wealth into the coffers of the world. The farms, mines and stock ranges of Colorado all contain wealth of fabulous proportion. The highest wages are here paid to all classes of labor. The labor organizations have become great, wealthy institutions controlling vast sums of money and large armies of people. The labor trouble was not caused because of poor pay or starving families, but because there were two mighty combinations of forces, wealth on the one hand, and labor on the other, who because of their greatness and strength were anxious to cross swords in a struggle for the mastery.

The recent agitations cannot be made to question the prolific resources of the State, but on the other hand, when properly understood, clearly indicate the vastness of the State's prosperity.

Combined wealth may be arrogant and, if opportunity offers, oppressive; but the combined forces of labor are no less so, if opportunity is afforded.

A great problem is being worked out throughout the eutire world, and Colorado is more favorably situated to meet any crisis of a physical nature that may develop than any other place, and offers inducements at the present time that are not afforded by any other portions of the United States.

In times of such grave moment as the present, when crises seem to be developing all over the world, the outcome of which but few are able to comprehend, it be-

hooves all men to look carefully to the basis upon which they build their conclusions. We take pleasure in referring all to the plain Word of God, the Bible, as containing the only plausible solution of the present crises that are everywhere arising.



MONTROSE COUNTY HIGH SCHOOL.

CONCLUSION.

It has been our honest purpose to compile in this little volume the information we have regarded of greatest importance to those contemplating a change of location. We have tried to not overdraw or exaggerate in any instance. We do not hesitate to say that all are not doing with their lands that which has been recorded of some in this book. We as unhesitatingly say that what a few are

doing all may do, when plenty of water comes, provided they are willing to put forth the effort the few are expending.

In the preceeding pages we have presented the advantages of this favored section. Nothing has been said of the disadvantages that are met in the valley.

Perhaps the most unsatisfactory matter with which the people have to deal is the narrow gauge railroad system. The Denver & Rio Grande Railway Company operates a narrow gauge railroad in this section, but the bridges have all been broadened the past year, and broad gauge ties are now being placed, and the word has gone out that before the dawn of 1906 the Uncompahgre Valley will have a broad gauge system.

The diseases to which orchards are in most fruit-growing sections subjected are absent from this section. The codling moth is the worst pest with which the orchardist has to contend, and it has been fully demonstrated that by careful spraying this enemy can be overcome.

Vegetables are free from disease and pests. The potato beetle is not found in the valley, and grasshoppers and other bugs and worms give no trouble.

The grains are unmolested by smut and chinch bug. The land is free from destructive winds and torrential rains. There are no poisonous reptiles and insects to fear in the Uncompahgre Valley.

Crop failures are not known on lands possessing good water rights. If the husbandman sows, he is as sure of

reaping a harvest as that the Lord will send the sunshine.

Market stagnation is unknown. The farmer can always turn his produce into cash at some figure. There has been an over-production of potatoes twice in twenty-two years. The grain products do not begin to supply the demand, and marketable fruit can always be sold.

The sugar beet industry offers special inducement to all comers. There is absolutely no limitation upon the demand for this product. Colorado, and especially the Uncompahgre Valley, holds the record for producing the sweetest sugar beets grown in the United States.

The valley has no drawbacks. The Gunnison Tunnel project will overcome the only serious drawback which ever confronted it.

In many respects it is a more desirable place in which to make a home than California. A greater variety of products can be grown than in California. The sun is never too hot for comfort, and the winters are not severe enough to be disagreeable. The autumn climate is the finest in the world, and the springs are short and not at all unpleasant.

The Uncompahgre Valley is a satisfying portion, and offers a cheerful welcome to all.

ODE TO THE UNCOMPAHGRE VALLEY.

Where the sun climbs o'er the mountains in the bright and sunny west

In the Colorado southland where kind Nature did her best,
Lies a little winding valley nestling in the hills secure,
And the lofty snowcapped mountains stand on guard to keep it pure.

Everywhere within its borders God's sweet flowers in fullness bloom,
And the richness of their fragrance seems to drive away the gloom
Of the faint and heavy hearted, who have passed our open doors,
To find rest within our portals, and to feast upon our stores.

Early in the balmy springtime, when deft Nature lifts her hand,
And delivers from her treasures life unto the waiting land,
Comes the bloom on peach and apple, spreading sweetness everywhere,
'Till our cup of joy and gladness gathers pleasures from the air.

And the red and purple blossoms of the clover add their part
To the circinating good-will flowing round from heart to heart.
Winter short and springtime pleasant have prepared a fitting mould
For the fruit that gentle Autumn paints with blushing red and gold.

And it seems that Summer lingered just to add its store of wealth
To the overflowing measure Autumn gathered by its stealth.
Round us range the stately mountains with their treasures rich and rare;
On their breasts the sheep and cattle feed in peace and plenty there.

And the good Lord up above us opens wide his hand of grace,
And the overflow of heaven seems to reach this favored place;
And the Uncompahgre Valley—this the name the poet sings,—
Is a synonym of richness and abundance of all things.

'Tis the home of happy people, and we share the peaceful lot
That is common to our valley, to this favored, blessed spot,
Rich in Nature's gifts and offerings that have fallen at our feet,
Hail! to smiling Uncompahgre, and its fodder, fruit and wheat.

May our homes be ever models, ever places to adore!
May our welcomes at their portals bid the stranger share our store.

Here, contented with our children, we will not be lured to roam,
'Till our gracious heavenly Father calls us to a better home.

Irrigated Farms in the Little Empire of the Western Slope.

Profitable farm lands are scattered all along
the line of

Denver & Rio Grande Railroad "Scenic Line of the World."

In the San Luis Valley and the Valleys of the grand Gunnison, Uncompahgre, North Fork and Roaring Fork Rivers in Colorado and Farmington, New Mexico, farming, stock raising and fruit growing are carried on in a way that is a revelation to the farmer in the east. For those who desire to make new homes, there is no other region that offers more and better advantages than western Colorado, a land of blue skies and sunshine, with a temperate and even climate, where the erstwhile desert needs but to be tilled and watered in order to verily "Blossom as a Rose." Several publications, giving valuable information in regard to the agricultural,

horticultural and live stock interests of this great western section have been prepared by the DENVER & RIO GRANDE Railroad, which can be obtained by writing to



S. K. HOOPER, G.P. & T.A., Denver, Colorado.

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A general land brokerage business. The best land on the western slope of Colorado listed with us. Situated in the center of the fertile Uncompahgre Valley.

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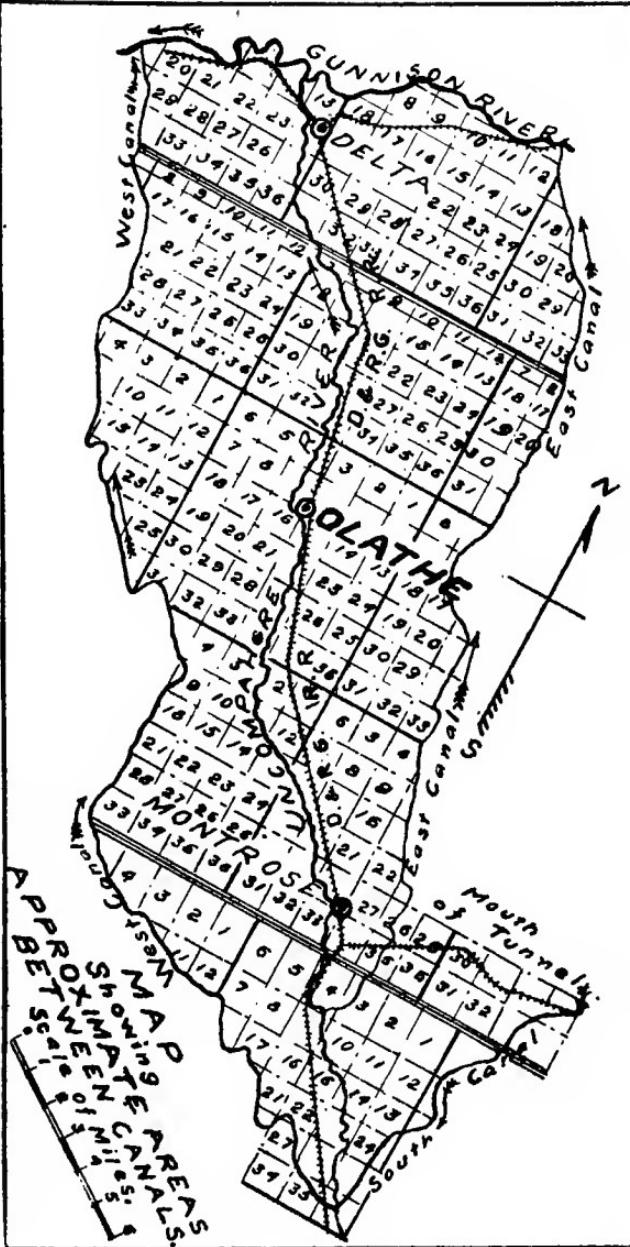
Correspondence solicited with eastern parties wishing homes on the lands to be irrigated by the great Gunnison Tunnel.

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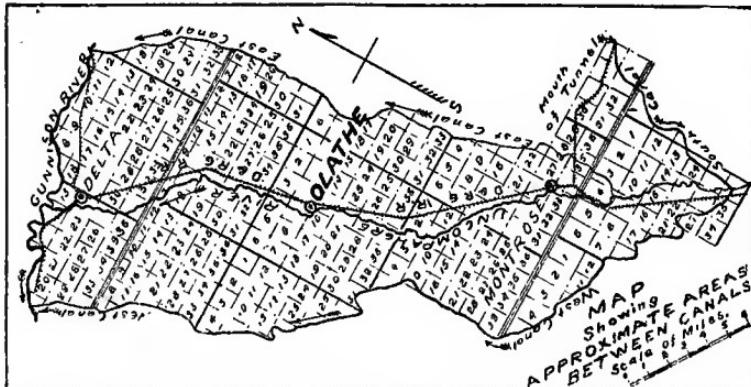
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OLATHE THE HUB OF THE GUNNISON TUNNEL PROJECT

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For full information address the

OLATHE CHAMBER OF COMMERCE.

Olathe, Colo.

Write to

W. O. REDDING

Montrose, Colo.,



for prices and general information pertaining to the lands in Montrose County, Colorado, and the Uncompahgre Valley under the Gunnison Tunnel project.

**Descriptive Pamphlets
Furnished.**

Immigration rates obtained. Fourteen years a resident of this valley and actively engaged in the REAL ESTATE business during that time.

References:

The First National Bank, Montrose.

The Montrose National Bank, Montrose.

The Equitable Security Company, New York City.

The Farm Investment Company, Greeley, Colo.

All Letters Answered by Return Mail.

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